

## MATERNAL AND INFANT HEALTH SECTION OF THE DEMOGRAPHIC AND HEALTH SURVEY REPORT OF GHANA

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### **Abstract**

This article is basically a commentary on some sections on infant and maternal healthcare of the 2008 demographic and health survey of Ghana. The attention of both policy makers and academics are drawn to the need to ensure the expansion of the maternal and infant healthcare in Ghana. In same commentary, attention of readers have been drawn to the proclivity of the free maternal health policy to positively shape maternal and infant care in Ghana.

**Key Words:** Maternal, Infant, Care, Health Survey, Ghana

### **I. Introduction**

Motherhood is a positive and a fulfilling experience but for too many women it is associated with suffering, ill-health and even death.<sup>1</sup> This is why it is necessary for the mother to receive proper health care during pregnancy and after delivery for the baby. This review presents findings on several areas related to maternal health; antenatal, delivery, and postnatal cares as well as problems in accessing care.

By the turn of 2001 Ghana had successfully gone through a democratic election which brought to power the opposition New Patriotic Party (NPP) with John Agyekum Kuffour as the president. To a large extent ushering in a new leader (president) in Ghana after over twenty-years of rule by Jerry John Rawlings' Provisional National Defense Council (PNDC) /National Democratic Congress (NDC) gave the country a new political colour and goodwill before the international community.

Again, the Millennium Development Goal (MDG), goal five (5) on maternal and infant health in 2005 seem to have given the country a test to achieve some set goals in improving the health of children and women. It is therefore expected that by the third year of the program (2008), the country might have made some gains towards the attainment of the goals.

Significantly, the year 2008 also marked the end of the two presidential terms of President John Agyekum Kuffour and the NPP. To an extent, this paper should also serve in part, an attempt at assessing the maternal and infant health of Ghana and the NPP government in particular. It also draws on some antecedent factors that might have influenced the outcomes of the 2008 report. This paper also serves as the basis for another retrospective study on 2016

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<sup>1</sup> Maternal Health", WHO, Last modified August 2013. [http://www.who.int/topics/maternal\\_health/en/](http://www.who.int/topics/maternal_health/en/).

maternal and infant health report, accessing how antecedent factors especially from 2008 to 2015 might have influenced health outcomes of mothers and infants.

## II. Antenatal care coverage

Antenatal care can be defined as the care a mother receives from healthcare professionals during pregnancy<sup>2</sup> the major motive of antenatal care is to discover and treat problems during pregnancy such as anemia and infections. It is during these visits that screening for complications and advice on a range of issues including birth preparedness, place of delivery, and referral of mothers with complications occur. Information on antenatal care is very essential because it helps to discover sub-groups of women who do not patronize such services and is useful for planning improvements in the services. The antenatal care findings from the 2008 Ghana demographic and health survey provide information on the type of service provider, the number of antenatal visits, the stage of pregnancy at the time of first visit, and the services and information provided during antenatal care, including whether tetanus was received.

According to the 2008 Demographic health survey, five years before the survey, if a woman received antenatal care from more than one provider the provider with the highest qualification was recorded but since the last survey in 2003 the Ghana health service has included another category of health care providers within the health care delivery system. The survey showed that over ninety-five (95%) percent of mothers receive antenatal care from health professionals. Almost no mothers receive antenatal care from traditional midwife and four percent (4%) of mothers do not receive any antenatal care. In antenatal care coverage the differences in the women's age are not large but there were some differences by birth order. However, most mothers are likely to receive antenatal care from health professionals for the first birth than for births of order six or higher. There were also differences in the usage of antenatal care services between women in the urban and rural areas. Ninety-eight percent (98%) of mothers in urban areas receive antenatal care from health professionals compared to ninety-four percent (94%) of mothers in rural areas. Most mothers receive antenatal care services from health professionals regardless of region of residence. However the proportion of women receiving no antenatal care declined slightly from six percent (6%) in 2003 to four percent (4%) in 2008. For example in Volta region it was known that about one in ten pregnant women did not receive any antenatal care in the five years before the survey. However the availability of health professionals has helped to increase access to professional care for women during antenatal period in the three northern regions and has also reduced the number of women who received no antenatal care. For example in 2003 sixteen percent of women in the Northern region received no antenatal care, but in 2008 the number reduced to just three percent. The same trend occurred in both upper East and upper west regions where the percentage of women receiving no antenatal care dropped from 14 to 9% respectively in 2003 and to 4 and 2%, respectively in 2008. Also the Educational level of women helped them in patronizing antenatal care services. This was because according to the survey almost all women who had some secondary education received prenatal care services from a

<sup>2</sup>Definition of Antenatal Care, Google, accessed on November 2, 2015, [www.nhs.uk/conditions/pregnancy-andbaby/pages/antenatal-midwife-care-pregnant.aspx](http://www.nhs.uk/conditions/pregnancy-andbaby/pages/antenatal-midwife-care-pregnant.aspx)

health professional as compared with ninety-four percent (94%) of mothers with primary or no education. There was also a positive relationship between professional antenatal care coverage and wealth quintile, with women in the highest wealth quintiles more likely to receive care from a health professional than those in the lowest wealth quintile, although the difference was small. Midwives and other mid-level providers made up the largest proportion of health professionals providing antenatal care in all regions except Greater Accra. In a research conducted by Afua A. Opoku on the Utilization of Maternal Healthcare in Ghana the fundamental finding of that study showed that skilled personnel delivered about half the births occurring in the two years prior to the Multiple Indicator Cluster Survey (MICS). This research was based on data examined from the 2006 Annual Statistics data from the Multiple Indicator Cluster Survey Ghana (2006) and the Ghana Health Services (GHS) half-year 2006, 2007 and 2008 reports. These data helped to supply information on what has happened at the regional levels. In this research percentages were calculated from the original data sets in order to know the different situations occurring in the regions. This percentage was highest in the Greater Accra Region eighty-three percent (83 %) and Ashanti Region sixty percent (60%) with seven of the regions below fifty percent (50%) (Western, Central, Volta, Eastern, Northern, Upper East and Upper West).<sup>3</sup> It is very essential that most women in Ghana have access to professional care during pregnancy. The survey results showed that there has been a marked improvement in antenatal care coverage in Ghana over the past twenty years.

### III. Number and Timing of Antenatal care visits

Antenatal care is very important in preventing problematic outcomes when it is sought early in pregnancy and continued through to delivery. The World Health Organizations recommends that a pregnant woman without any complication have at least four antenatal care visits. In Ghana there is an increasing trend among pregnant women to have four or more antenatal care visits. According to the 2008 demographic health survey among women age 15-79 who had a live birth the five years before the survey, about seventy-eight percent (78%) pregnant women had four or more antenatal care visit for their most recent live birth. This showed an increase over the 2003 survey when about sixty-nine percent (69%) pregnant women had four or more visits during their pregnancy. Although women in urban areas are more likely than women in rural areas to make four or more antenatal care visit, the increase between 2003 and 2008 was larger for women in rural areas, that is, sixty-one percent (61%) to seventy-two seven percent (72%) than for women in urban areas from 84 to 88 percent. There was also an increasing trend for women to have their first antenatal care visit before the fourth month of pregnancy (55% in 2008, compared with 46% respectively in 2003) and the gap is narrowing. Sixty-one percent (61%) of women in urban areas and fifty-one percent (51%) of women in rural areas had their first antenatal visit before their fourth month of pregnancy (56 and 41% respectively in 2003 while 30 percent of women, in urban areas and thirty-three (33%) of women in rural areas respectively, in 2003). Among women who received antenatal care, the median number of months pregnant at first visit was 3.7 months for women in urban areas, and 3.9 months for women when in rural areas compared with 3.8 and 4.2

<sup>3</sup> Afua A.Opoku,"Utilization of Maternal Care Services in Ghana by Region after the Implementation of Free Maternal Care Policy", (2007): Accessed on October 20, 2014. <http://digitalcommons.hsc.edu/theses/78>

months. However in Karen Grepin's research about effect of the free exemption policy in Ghana, it showed that the coverage of supervised deliveries was much lower in the early intervention regions than in the other regions prior to the introduction of the Delivery Free Exemption Policy.<sup>4</sup> Furthermore the introduction of the Delivery Fee Exemption Policy seemed to have had a positive and significant impact on the ratio of births supervised by trained medical professionals in Ghana which had increased by roughly fourteen to seventeen percent (14 to 17%), the ratio of births delivered in any institution in Ghana also increased by sixteen percent (16%), the proportion delivered in a public institution also increased by nineteen percent (19%), and the proportion of births delivered in a hospital increased by fourteen percent (14%).<sup>5</sup> This increasing trend for women having their antenatal care visit before the fourth month of pregnancy could be probably due to the introduction of the free maternal policy on the National health Insurance which enables pregnant women to access healthcare for free.

#### **A. Components of Antenatal care.**

The distinguishing attribute of antenatal care is calculated by the indispensable service package provided to pregnant women. Some of these indispensable packages include the prevention and management anemia and malaria. The giving of micronutrient supplementation, tetanus immunization, and the monitoring of certain vital signs helps to reduce complications that may arise. The primary source of maternal and new born mortality and morbidity are as a result of pregnancy complications. Hence it is beneficial for pregnant women to receive adequate information on the signs of complication.

According to the 2008 Demographic health survey on the issue of assess antenatal care services the respondents were asked whether they had been advised of possible pregnancy complications and whether they had received certain screening test during at least one of their antenatal care visit. The data showed that irrespective of whether women attended antenatal clinic or not, eighty-seven percent (87%) of the women with recent births took iron supplements during pregnancy but only thirty-five percent (35%) took in de-worming medicine during pregnancy. This is because deworming helps in anemia prevention in pregnant women and it must be done with caution because of the possible side effects particularly when taken in early pregnancy. Therefore health professional prescribe de-worming tables of pregnant women either based on laboratory findings or the prevalence of parasites in a specific locality.

However, the magnitude of women who undergo basis test during pregnancy is nearly universal throughout Ghana; virtually all women who gave birth five years before the 2008 GDHS reported that they were weighed and had their blood pressure measured. On the other hand just sixty-eight (68%) of these women were informed of signs of complication in pregnancy. This is because the likelihood of receiving information about pregnancy complications is related to the women's level of education, household wealth status, age, residence (urban-rural) and region. The magnitude of women who were reported to have received information about complications increases with age, with women under age twenty (20) being least likely to receive this

<sup>4</sup> Karen, Grepin, „The Effect of a Delivery Fee Exemption Policy on the Utilization of Maternal Health Services in Ghana.(2009): accessed on April 30,2014.<http://www.people.fas.harvard.edu/grepin/>

<sup>5</sup> Ibid

information. This probably because women aged above 20 have much experience, matured are adequately well informed about pregnancy issues.

The findings from the 2008 GDHS indicated that there has been only slight increase in the quality of antenatal care, compared with the previous survey. One of the key areas in antenatal that needs strengthening is providing adequate information on signs of complications. Also another key area in antenatal care that needs strengthening is access to basic laboratory services such as urine and blood testing in the Northern and upper West regions. This is because these two regions are affected by limited access to these components of antenatal care.

## **B. Tetanus Immunization**

Tetanus is a neurological disorder (caused by gram-positive rod *Clostridium tetani*) which is characterized by increased in muscle spasms. If tetanus occurs in neonates (that is a baby of age less than 4 weeks or 28 days) it is called neonatal death. It is commonly seen in first two weeks of life.<sup>6</sup> Neonatal death occurs where high proportions as deliveries are conducted at home or places where hygienic conditions may be poor. For full protection of pregnant woman needs two doses of tetanus toxoid during pregnancy. However if the woman was immunized before she became pregnant she may receive one or no tetanus injection during pregnancy depending on the number of injections she has ever received and the timing of the last injection. For a woman to have a life time protection five doses is required.

According to the survey it was revealed that ninety-six percent (96%) of women in Ghana received two or more tetanus injections during pregnancy and that seventy-two (72%) of births are protected against neonatal tetanus. It is very essential to note that older women and those with six or more birth are the least likely to receive two or more tetanus injections during pregnancy for their last birth. This is because by that time they had already received all five doses required for a life time protection. Again there was a little difference in tetanus coverage by age at birth order, residence, educational level, and wealth quintile.

However, a comparison between the 2003 and 2008 surveys on the percentage of women who had two or more TT injections during their last pregnancy that ended in live birth shows that there had been an increase from fifty percent (50%) in 2003 to fifty-six (56%) in 2008. This is probably because of the introduction of the free maternal care policy which was presented as one of the implements in addressing maternal and infant mortality in Ghana

## **C. Delivery care and place of Delivery**

The most critical and the shortest period in pregnancy are labour and delivery. This is because most maternal death arises from complications during delivery. Even with the best possible antenatal care, any delivery can become complicated one that is why it is very essential for pregnant women to seek for skilled assistance. But for various reasons many women do not seek skilled care even when they understand the safety reasons for doing so. Some of these reasons include cost of service, distance to health facilities and quality of care. The introduction

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<sup>6</sup> Definition of tetanus, goggle, accessed on November 2,2015, Mantrine,blogspot.com.com/2012/01/neonatal-tetanus-definition-causes-and.html

of the free maternal care policy in 1st July 2008 and the locating of CHPS compounds closer to where people live are some of the efforts that have been made to remove blockades to accessing skilled maternal care. These CHPS compound are manned by community health officers, some of whom are midwives or have midwifery skills to attend to delivers and make referrals should complications arise.

According to the 2008 GDHS respondents were asked to report the place birth for all their children born in the five years before the survey. It was revealed that fifty-seven (57%) of births were delivered in health facilities with the public sector recording the largest proportion; which was an increase compared to forty-six percent(46%) in 2003 GDHS. . However in a research conducted by Brugiavini and Pace (2010) on positive outcomes of NHIS on maternal health care in Ghana it was found out that members of the NHIS were “more likely to use prenatal care, deliver in hospitals and be attended by trained professionals compared with non-members.”<sup>7</sup>

#### **D. Assistance at Delivery**

According to the survey on the issue of assistance to delivery it was revealed that fifty-nine percent (59%) of births in Ghana were delivered with the assistance of health professionals, thirty percent 30% were delivered by traditional birth attendance and about one in ten births were assisted by a relative, or assisted by no one. On the issue of antenatal care the use of the community health officers provided women with access to professional assistance during child birth. However the overall effect of using the community health officers was much lower for delivery than antenatal care.

#### **E. Complications of Delivery**

According to the 2008 GDHS it was revealed that access to caesarean section increased from 4 percent in 2003 to 7 percent in 2008 nationally. Caesarean section was more common in urban areas (11 percent) than in rural areas which were 5 percent. The reason for this is possibly because of the greater access to doctors in urban areas. Also there were regional differences to caesarean sections with women in the Ashanti region having the highest access, followed by women in the greater Accra and central regions. Women in the Upper East region had the least access to Caesarean section, it was also found out that women with higher levels of education and those living in wealthier households tended of have greater access to caesarean section than their less educated and less wealthy counterparts. It can be inferred that the reason for this difference is probably because these women were more likely to deliver with the assistance of health professionals who were able to perform caesarean sections. Moreover in a research conducted by Brugiavini and Pace (2010) on positive outcomes of NHIS on maternal health care in Ghana it was found out that members of the NHIS were “more likely to use prenatal care, deliver in hospitals and be attended by trained professionals compared with non-members.”<sup>8</sup>

<sup>7</sup> Brugiavini, A. & Pace, N. “Extending health insurance: effects of the national health insurance scheme in Ghana”(2010),1-35. Accessed on April 30, 2015. <http://erd.eui.eu/publications/erd-2010-publications/background-papers/extending-healthinsurance/>

<sup>8</sup> Brugiavini, A. & Pace, N. “Extending health insurance: effects of the national health insurance scheme in Ghana”(2010),1-35. Accessed on April 30, 2015. <http://erd.eui.eu/publications/erd-2010-publications/background-papers/extending-healthinsurance/>

### **F. Postnatal care**

A postnatal check –up within the first week of delivery is very essential for ensuring optimal maternal and newborn health. In Ghana, the first postnatal check- up is advised within the first three days of delivery and subsequent check-ups are made appropriate. According to the women interviewed in the 2008 GHDS when asked about their most recent birth in five years before the survey, specifically, whether they received a health check-up after the delivery. 57% of the women responded that they received postnatal within the 24 hours after delivery, 68 percent also responded that they received check-up within the first two days after delivery and 7% of the women responded that they received postnatal care within 3 to 41 days after delivery. This was because women with fewer children were more likely to have an early postnatal check-up than women with more children. Also women who delivered in health facility were more likely to have a postnatal check-up within the first two days compared with women delivering else -where. Again women in the highest quintile were about twice likely to have early postnatal checkup than women in lowest wealth, quintile. Secondly when the women were asked about the type of provider of first postnatal check-up providers used according to their background characteristics, sixty-three percent (63%) responded that they obtained postnatal care from health professionals and twelve percent (12%) responded that they obtained postnatal care from traditional birth attendants. Twenty-three percent (23%) also responded that they did not receive any postnatal care within 41days which almost marks the end of postnatal period. The differences in the type of postnatal care provider were similar to those for postnatal coverage in general. The likelihood of women receiving postnatal care from health professionals decreases with increasing parity, educational levels, and wealth quintile.

### **G. Problems in accessing Health care**

Where health services are present there are several factors social, cultural and economic that causes women not to use the services particularly when the health concern is related to sexual or reproductive matters. According to the survey when women were asked whether they faced problems in accessing health care for themselves two major concerns were raised and they were getting money for treatment and availability of drugs (each 45%). Forty-four percent (44%) also responded that another major problem in accessing healthcare was the availability healthcare provider. The women interviewed had about equal concern regarding the distance to health facility and having to take transport. Getting permission, to go for treatment was the least of the women worries seven percent (7%). About one in five women considered lack of female provider and not wanting to go alone as problem. In general women with at least a secondary education and women in the highest quintile were least likely to report having a serious problem in accessing health facilities. The greatest disparity was seen regarding the problem of having to take transport to health facilities. Fifty percent (50%) of women in the lowest wealth quintile regarded this as a serious problem compared with only 13 percent of women in the highest wealth quintile.

## **IV. Conclusion**

It is essential to appreciate the fact that maternal health in Africa and Ghana in particular needs serious attention. The efforts made so far by the respective administration needs the support

of the masses especially in highlighting the progress of maternal health and also encouraging the education of the girl child to ensure an increasing formally educated females or women who will find it useful to access the services of professionals for their health and well-being. In doing so, they would be able to eschew those beliefs or world-view that precludes them from actively engaging the health personnel especially when they are attended to or tend to seek their services. From this appraisal, it has become necessary to continue to increase resources and logistics for providers of maternal and infant care.

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