

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/309615135>

Determinants of obstetric care seeking behavior and facility delivery among expectant mothers in Northern Ghana

Article · August 2016

CITATIONS

0

READS

92

4 authors:



Mate Siakwa

University of Cape Coast

52 PUBLICATIONS 166 CITATIONS

SEE PROFILE



Solomon Suglo

Tamale Teaching Hospital

7 PUBLICATIONS 2 CITATIONS

SEE PROFILE



Dannabang Kuwabong

University of Puerto Rico at Rio Piedras

12 PUBLICATIONS 7 CITATIONS

SEE PROFILE



Amandus Ankobil

New York State Department of Health

15 PUBLICATIONS 14 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Birth Outcomes in HIV Positive Women Receiving Antiretroviral Therapy [View project](#)



Muscular Dystrophy Surveillance, Tracking and Research Network [MD STARnet] [View project](#)

DETERMINANTS OF OBSTETRIC CARE SEEKING BEHAVIOR AND FACILITY DELIVERY AMONG EXPECTANT MOTHERS IN NORTHERN GHANA.

¹ MATE SIAKWA, SOLOMON SUGLO¹ DANNABANG KUWABONG,² AMANDUS ANKOBIL,¹

¹University of Cape Coast, School of Nursing and Midwifery, Ghana

²University of Puerto Rico, Department of Humanities, Puerto Rico

ABSTRACT

Access to obstetric care is key to reducing maternal mortality the world over. This study sought to explore determinants of obstetric care seeking behavior and facility delivery among expectant mothers attending antenatal clinic at the Tamale Teaching Hospital. A systematic random sampling technique was used to select pregnant women for the study. A structured questionnaire was used to assess their socio-demographic characteristics knowledge regarding the risks associated with pregnancy as well as delivery and birth plan arrangements. Data were analyzed with Statistical Package for Social Sciences (SPSS) software version 22. χ^2 test was used to determine associations between respective variables. Variables that displayed significant associations were entered into a multiple logistic regression model to ascertain the strength of association (Odds Ratios) between respective variables. At 95% confidence interval, p -values less than 0.05 were deemed statistically significant. Age ($p < 0.05$), religion ($p < 0.05$), educational status ($p < 0.001$), level of knowledge on obstetric risks ($p < 0.001$), number of ANC visits ($p < 0.001$), marital status ($p < 0.05$), income level of participants ($p < 0.01$) and cost of services ($p < 0.001$) determined birth preparedness and their choice of facility delivery. However, the attitude of health workers ($p > 0.05$) and birthing tradition of the respondents ($p > 0.05$) were not associated with birth preparedness and choice of place of delivery. Strategies to enhance access to obstetric care and facility delivery must focus on the aforementioned determinants.

Keywords. Facility delivery, Obstetric beliefs, antenatal, maternal mortality

Introduction

The world health organization, WHO (2015) defined maternal health as the health of women during pregnancy, childbirth and the postpartum period. Comprehensive awareness on the occurrence of maternal mortality had been given slight recognition until the last two decades. About 26.4% of Ghanaian women who are married or are in consensual unions lack access to effective Family Planning, despite their desire to delay pregnancy and childbirth. The unmet need for family planning is greatest among adolescents (61.6%) that are around 46% more likely to die of the consequence of pregnancy and childbirths than older women (20-49 years old) (GSS, 2010). Lack of access to family planning has a direct connection to unsafe abortions which is a significant contributor to maternal mortality in Ghana (WHO, 2015a). Providing women with access to family planning and enabling them to decide how many children they want to have and when, prevents maternal mortality by reducing the

number of women dying due to pregnancies they never intended to have (Hailu et al., 2011). Meeting only 50% of the unmet demand for family planning in Ghana would reduce the number of unintended pregnancies and significantly reduce the number of abortions that are particularly high among women with unintended pregnancies.

Although it is acknowledged that there is no universally accepted definition of access to health services, Byford-Richardson et al. (2013) defined access as the timely use of service according to need. Utilization of health care is used as an operational proxy for access to health care. Access has four dimensions: availability, geographic accessibility, affordability and acceptability. Barriers to accessing health services can stem from the demand side and/or the supply side (Ensor & Cooper, 2004). Demand-side determinants are factors influencing the ability to use health services at individual, household or community level, while supply-side determinants are aspects inherent to the health system that hinder

service uptake by individuals, households or the community. The need to differentiate demand-side from supply-side barriers is related to the formulation of appropriate interventions to address both sides concurrently, because access barriers may not always be mutually exclusive, and may interact and influence each other. Byford-Richardson et al. (2013) provided a framework for assessing barriers along the four dimensions of access (each of them having supply-side and demand-side aspects) while Ensor and Cooper (2004) resented a framework of supply-side and/or demand-side barriers. Waiting time and direct payment for services are considered mixed supply-side and demand-side barriers by Ensor and Cooper (2004). This is because long waiting times indicate a distribution of staff and equipment not in accordance with need, and the pricing of services is determined by the health facilities (supply side), meaning that both factors are outside the control of the public as users of health services (demand side). It is well documented that the unwelcoming staff attitude or poor interpersonal communication skills as well as complex billing systems at hospitals impede access to maternal health care. This attitude of health workers creates lack of assertiveness and low self-esteem among the poor, which increased the difficulty of accessing services. Restrictions on the tasks that can be performed by various health staff resulted to limited provision of maternal care services. For instance, general nurses on certain grounds are restricted from performing certain lifesaving activities for the mere fact that they are not midwives. As a result, a client in dying need may have to wait until a midwife or a doctor arrives. This problem is critical in facilities where there are no clear protocols regarding service delivery (Solnes et al., 2013). The late referral or non-referral to specialist care of patients who may report with a condition at lower-level health facilities also served as a barrier to maternal health care. Teenagers who are pregnant but are not married face an dehumanizing stigma (Kaso & Addisse, 2014b). This makes them stay away from essential maternal health service risking themselves with pregnancy related complications. A lack of trust by users in health care providers or the intermediates that link the population with these providers makes people reluctant to use the respective services (Byford-Richardson et al., 2013). Another barrier to maternal health services is failure to deliver integrated health services together with complementary programmes provided to a target group, such as overlooking the opportunity to check and update vaccination status or to administer

Vitamin A when a child is brought to the health facility for other services. The effect of non-financial barriers, such as lack of health awareness, apparent unfelt need or lack of opportunity (defined as exclusion from social and health providers) also play a major role in accessing maternal care. Other non-financial barriers, such as means of transport, private-public dual practice through which patients are siphoned off from public health facilities to health workers' private practices, where they may be subjected to more expensive often irrational treatments is evident (Jacobs et al., 2011). Staff absenteeism, limited opening hours that do not allow for dealing with emergencies or working times are not also convenient for patients, especially working people.

In the absence of universal coverage, there are two main targeting options for enabling greater access to health services for poor and vulnerable patients, namely to build the capacity of health care providers to target service provision on selected groups (a supply-side strategy), or to reduce the barriers to access and participation (a demand-side strategy) (Ensor & Cooper, 2004). Interventions aimed at facilitating access to health services need to be implemented at district level, as this is known to constitute the most appropriate geographical situation for PHC. However, consideration should be given to the potentially limited capacity of district health managers in low income countries. Moreover, because most barriers to care cannot be overcome by the health sector acting alone, inter-sectoral collaboration is called for. Although considered the most neglected aspect of PHC, community participation should be built into interventions addressing access barriers as it reduces the power gaps between the population and health systems (Skinner & Rathavy, 2009). Whatever interventions are developed, monitoring their service uptake should be an integral part of the strategy. It is assumed that higher levels in the health sector, such as provincial and national health authorities, set out the broad policy framework, enforce legislation, ensure provision of a relatively steady supply of funds, goods and equipment, and conduct monitoring and supervision of the lower echelons in the health system. Many proposed interventions take a monetary-incentive approach to addressing access barriers to health services. Often, these financial incentives are channeled through the demand-side, seemingly due to a donor reaction to governments' failure to deliver sufficient health services and a

perception of inertia of authorities at all levels (Soubeiga et al., 2014).

Ethnicity and religion are often considered markers of cultural background and are thought to influence beliefs, norms, and values in relation to childbirth, service use, and women's status. Ethnic identity may also be associated with health beliefs that influence whether care is sought and whether that care is traditional or biomedical. In a study conducted in Nigeria, it was shown that ethnicity made no significant difference in the use of antenatal care. However, it made a significant difference in the use of skilled assistance and post-natal care. Moreover, the level of service utilization was significantly higher among the Igbo (in the Southeast) compared to the Hausa (in the North) (Iliyasu et al., 2010b). These findings reflect the influence of cultural and religious beliefs on access to maternal health services. As regards religion, Islamic religion has also been shown to exert strong influence on the cultural beliefs and traditions on childbirth practices among the Hausa people in the northern part of Nigeria. In contrast, the Igbos seemed to utilize maternal healthcare facilities more because of their Western style education and largely Christian background.

The employment status of women has also been shown to predict the usage of maternal healthcare. Women who work and earn money have the opportunity to save and hence make an easy decision to spend on a facility delivery of their choice (Tura et al., 2014). The central aim of this study was to learn more about the perceptions expectant mothers have of barriers to their access to maternity care at the Tamale Teaching Hospital, one of four Teaching Hospitals located in the Northern Region of Ghana. While physical barriers were also investigated, this study will also draw attention to emerging social determinants.

Methods

This institution based cross-sectional study was conducted at Tamale Teaching Hospital from

February 16, 2016 to April 16, 2016. The Tamale Teaching Hospital serves as a referral centre for cases from regional hospitals, districts hospitals, private hospitals, and several health centres within and outside the Northern Region of Ghana. An ethical clearance certificate with reference number UCC/IRB/3/40 was obtained from the University of Cape Coast's Institutional Review Board. Formal written permission to conduct the study was also obtained from the Northern Regional Health Directorate as well as the Research and Development Division of the Tamale Teaching Hospital. For the purposes of the study, all pregnant women and mothers who were in the period of exclusive breast feeding (within 6 months after delivery) qualified to take part in the study. In contrast, pregnant women who migrated into the metropolis during the period of data collection were excluded from the study. Data were collected using a self-administered pre-tested and structured questionnaire which was double entered into excel, validated for data entry errors and exported onto the Statistical Package for Social Sciences (SPSS) software version 20.01 for windows and analyzed. Demographic characteristics such as age, ethnicity, education, marital status, occupation, etc were summarized using frequency distribution tables and displayed as frequencies and percentages. The Pearson's chi-squared (χ^2) test was then used to determine associations between maternal demographics (age, ethnicity, education, marital status, occupation, religion, etc) and women's choice of place of delivery as well as overall preparedness towards childbirth. Where there were significant associations, the multiple logistic regression model was employed to determine the strength of association and hence the Odds Ratio between respective variables. At the 95% confidence interval, a p-value less than 0.05 was considered to be statistically significant.

Results

Table 1: Demographic and general information

Variable	Frequency	Percentage (%)
Age		
11-20	68	19.7
21-30	188	54.5
31-40	77	22.3
41-50	12	3.5
Total	345	100
Ethnicity		
Dagomba	180	52.2
Gonja	45	13.0
Ewe	16	4.6
Akan	19	5.5
Konkomba	11	3.2
Bimoba	10	2.9
Gruni	14	4.1
Dagaaba	22	6.4
Others	28	8.1
Total	345	100
Religion		
Muslim	235	68.1
Christian	100	29.0
Traditionalist	10	2.9
Total	345	100
Marital Status		
Single	73	21.2
Married	250	72.5
Widowed	8	2.3
Divorced	14	4.1
Total	345	100

Table 1 continues

Variable	Frequency	Percentage (%)
Educational Status		
No formal education	110	31.9
JHS	75	21.7
SHS	56	16.2
Tertiary	104	30.1
Total	345	100
Occupation		
Unemployed/housewife	62	18.0
Trader	86	24.9
Student	22	6.4
Skilled worker	70	20.3
Farmer	20	5.8
Public/civil service	85	24.6
Total	345	100

Income Status		
Low Income	243	70.4
Middle Income	90	26.1
High Income	12	3.5
Total	345	100

Table 2: Awareness of Maternal health services among study women

<i>Available facility services</i>	Strongly disagreed n(%)	Disagreed n (%)	Agreed n (%)	Strongly Agree n (%)
Services available at health facility Laboratory, blood bank, HIV/AIDS/Hep B, counseling, theatre services and ANC	3(0.8)	33(9.6)	206(60.6)	100(29.0)
<i>Barriers To Maternal Health Services</i>				
Judgmental attitude of health workers	7(2.0)	109(31.6)	196(56.8)	33(9.6)
Lack of ambulance service	14(4.1)	82(23.8)	184(53.3)	65(18.8)
Deplorable road network	11(3.2)	97(28.1)	76(51.0)	61(17.7)
<i>Reasons For Home Birth</i>				
Home birthing tradition	34(9.9)	210(60.9)	81(23.5)	20(5.8)
Poor hospital Infrastructure	31(9.0)	130(37.7)	126(36.5)	58(16.8)

Table 3: Obstetric Beliefs in Pregnancy and Child Birth

	Strongly disagreed n (%)	Disagreed n (%)	Agreed n (%)	Strongly agreed n (%)
Belief Talisman protects against witchcraft	40(11.6)	91(26.4)	107(31.0)	107(31.0)
A man who sees a woman naked in labour causes obstructed labour	40(11.6)	116(33.6)	125(36.2)	64(18.6)
Early announcement of pregnancy causes miscarriage	38(11.0)	74(21.4)	123(35.7)	110(31.9)
Unassisted birth is a mark of fidelity and bravery on the part of the woman	34(9.9)	111(32.2)	125(36.2)	74(21.4)
Rituals for safe delivery	14(4.1)	39(11.3)	127(36.8)	165(47.8)

Table: 4 Determinants of Facility Delivery

Variable	N	Place of delivery		Chi-square (χ^2)	p-value
		Home n (%)	Facility (n)		
Educational Status					
No Education	82	39(47.6)	43(52.4)	27.646	0.000
Low Education	54	18(33.3)	36(66.7)		
High Education	108	14(13.0)	94(87.0)		
Total	244	71(29.1)	173(70.9)		
Marital Status					
Single	30	11(36.7)	19(63.3)	4.466	0.215
Married	195	53(27.2)	142(72.8)		
Widowed	7	1(14.3)	6(85.7)		
Divorced	12	6(50.0)	6(50.0)		
Total	244	71(29.1)	173(70.9)		

Table: 4 Determinants of Facility Delivery continued

Variable	N	Place of delivery		Chi-square (χ^2)	p-value
		Home n (%)	Facility (n)		
Knowledge on obstetric risk factors grouping					
Inadequate knowledge	37	19(51.4)	18(48.6)	10.468	0.001
Adequate knowledge	207	52(25.1)	155(74.9)		
Total	244	71(29.1%)	173(70.9)		
Number of ANC visits					
<4 visits	79	45(57.0)	34(43.0)	43.963	0.00
4+ visits	165	26(15.8)	139(84.2)		
Total	244	71(29.1)	173(70.9)		
Age of respondent					
11-20	28	17(60.7)	11(39.3)	19.590	0.000
21-30	135	28(20.7)	107(79.3)		
31-40	70	21(30.0)	49(70.0)		
41-50	11	5(45.5)	6(54.5)		
Total	244	71(29.1)	173(70.9)		
Religion					
Muslim	168	49(29.2)	119(70.8)	6.745	0.034
Christian	69	17(24.6)	52(75.4)		
Traditionalist	7	5(71.4)	2(28.6)		
Total	244	71(29.1)	173(70.9)		
Income					
low income	157	60(38.2)	97(61.8)	17.756	0.000
middle income	78	10(12.8)	68(87.2)		
high income	9	1(11.1)	8(88.9)		
Total	244	71(29.1)	173(70.9)		

Means of transport					
Agreed	127	27(21.3)	100(78.7)	7.888	0.005
Disagreed	117	44(37.6)	73(62.4)		
Total	244	71(29.1)	173(70.9)		
Funds for medical expenses					
Agreed	190	46(24.2)	144(75.8)	9.942	0.002
Disagreed	54	25(46.3)	29(53.7)		
Total	244	71(29.1)	173(70.9)		

Table: 4 Determinants of Facility Delivery continued

Variable	N	Place of delivery		Chi-square (χ^2)	p-value
		Home n (%)	Facility (n)		
Birth/emergency preparedness plan					
Agreed	108	26(24.1)	82(75.9)	2.371	0.124
Disagreed	136	45(33.1)	91(66.9)		
Total	244	71(29.1)	173(70.9)		
Items for delivery					
Agreed	138	32(23.2)	106(76.8)	5.378	0.020
Disagreed	106	39(36.8)	67(63.2)		
Total	244	71(29.1)	173(70.9)		
Home birthing tradition					
Agreed	77	35(45.5)	42(54.5)	14.588	0.000
Disagreed	167	36(21.6)	131(78.4)		
Total	244	71(29.1)	173(70.9)		
Poor hospital infrastructure and quality of service					
Agreed	137	49(35.8)	88(64.2)	6.733	0.009
Disagreed	107	22(20.6)	85(79.4)		
Total	244	71(29.1)	173(70.9)		

Table 5 Determinants of Facility Delivery (Multiple logistic regression Analysis)

Variable	S.E.	Df	Sig.	AOR	95% C.I.for AOR	
					Lower	Upper
Age	0.232	1	0.811	1.057	0.671	1.666
Education2	0.247	1	0.011	1.877	1.157	3.044
Religion		2	0.735			
Religion(1)	0.943	1	0.673	1.489	0.234	9.461
Religion(2)	0.985	1	0.926	1.096	0.159	7.561
Knowledge2	0.466	1	0.278	1.658	0.666	4.13

ANC2	0.38	1	0.00	5.359	2.544	11.289
Income		2	0.551			
Income(1)	1.264	1	0.733	0.649	0.054	7.74
Income(2)	1.265	1	0.938	1.104	0.093	13.17
Means of transportation 1	0.561	1	0.382	0.612	0.204	1.84
Items Delivery	0.495	1	0.695	0.824	0.312	2.174
Tradition	0.36	1	0.015	2.393	1.181	4.849
Marriage2	0.29	1	0.915	1.032	0.584	1.822
Birth Plan	0.714	1	0.544	1.542	0.38	6.252
Birth Preparedness	0.896	1	0.769	1.301	0.225	7.536
Attitude of health staff	0.411	1	0.343	0.677	0.302	1.516
Deplorable Road network	0.477	1	0.986	1.008	0.396	2.57
Cost of services	0.496	1	0.931	0.958	0.362	2.533
Constant	2.499	1	0.043	0.006		

Compared to those without any formal education, lower level of education, those with higher education were about 1.9 times more likely to deliver in a health facility (AOR=1.9, 95% C.I. 1.16-3.04, $p=0.01$). Compared to those with the number of ANC visits less than four (4), those with four plus (4+) visits were about 5.4 times more likely to deliver in a health facility (AOR=5.4, 95% C.I. 2.54-11.29, $p<0.01$). More so, compared to those who agree with the “home birthing tradition”, those who disagree with it were about 2.4 times more likely to deliver in a health facility (AOR=2.4, 95% C.I. 1.18-4.85, $p=0.02$) (Table 5).

Discussion

The findings showed that 54.5% of the respondents were within 21-30 years of age. This was predictable because most women marry at this age and would like to have babies during this period in life to continue their generation. This notwithstanding the study also revealed 19.7% were below the age of 20. These girls could be in forced marriages and often prevented from accessing sexual and reproductive health services. Despite the fact that risk

of maternal death for mothers within 11-20 years in low-and middle-income countries doubles that of older females 21-40, nevertheless, this group of very young adolescents is often beyond the reach of national health, education and maternal health services. Markos and Bogale, (2014) stated, older women were more likely to seek maternal healthcare than younger women. Similarly, in Nigeria, women in the middle child bearing ages were more likely to use maternal health services than women in early and late child bearing. And so being of older age at marriage is positively associated with the use of healthcare services (Cooke & Tahir, 2013). One study in rural India also reported that utilization of antenatal care was higher among women married at 19 or older compared to those married at less than 19 years (Nawal & Goli, 2013). Early marriage or child marriage is practiced more often in Africa and Southern Asia and the western world is no exception where teenagers marry and/or just live together against the parents' wishes, and laws have to be passed against older young men having sex with underage girls. The girls may be restricted from seeking healthcare services because of fear or need for permission from a spouse or in-laws (Campbell et

al., 2013). A girl in such a situation may also flee to her maternal/paternal home place to seek redress and care.

Women who had at least primary education were more likely to be prepared for birth and its complications compared to those who did not. These findings have also been observed in the study conducted in Mpwapwa district Tanzania, rural Uganda, North Ethiopia and Indore City India (Agarwal et al., 2010). This might be due to the fact that educated women know the importance of planning for birth, adhere to counseling provided at ANC, and also have the capability of making decisions on issues related to their health. Hence, the findings indicated, as educational level of these expectant mothers increased there was a corresponding increase in the likelihood of facility delivery. The study further revealed that respondents who were poorly prepared for birth were those with no formal education and the well prepared ones were respondents with high education. Education was found in this study to be integral and directly proportional to birth preparedness, therefore there was an association between expectant mothers' education and preparedness for birth ($P < 0.001$). In their studies, Urassa et al., (2012) showed that women with formal primary education and above were two times more likely to be prepared for birth and complications compared to those who lacked formal education. The high level of birth preparedness of the educated women might be related to the fact that women who are educated are more likely to be financially sound and also have better negotiating power and are able to make their own decisions in matters concerning their health than women who are uneducated. Another reason why better educated women were more prepared for birth is their ability to better understand health messages and search for more information regarding health issues. According to Kabakyenga et al., (2011) similar studies conducted in Tanzania and in Ethiopia have shown separately clear relationship between high education and awareness of danger signs of pregnancy. Hence, better educated women are more aware of health problems, know more about the availability of health care services and use this information more effectively to maintain or achieve good health status. According to literature, women's education has been found to be one of the key determinants of maternal healthcare utilization (Mbalinda et al., 2014). In India for example, women with high school education and above were 11 times

more likely to use antenatal care compared to illiterate women (Agarwal et al., 2010). Education of women is therefore likely to enhanced autonomy so that women could develop confidence and capabilities to make decisions regarding their own health.

In terms of religion, the study revealed that more Christian women were likely to deliver in a health facility than traditional and Islamic women. This could be as a result of certain negative practices by Muslims and Traditionalists that encourage home delivery regardless of the dangers thereof. For example, many communities in the northern, it is customary for a woman with her first pregnancy to deliver at home and undergo some rituals deemed necessary for survival of both mother and her new born. Religion also played a key role in this study concerning birth preparedness. In a study conducted in Nigeria, the level of preparedness for birth was significantly higher among the Igbos (in the south) and the minority tribe compared to the Hausas (in the north) (Iliyasu et al., 2010b). The Islamic religion may have had a strong influence on the cultural beliefs and traditions on child birth in the north. Also, some women in this study chose to turn to their deities when it comes to having babies similar to Ancient Egyptian women who incorporated rituals and ceremonies as an integral part of the pregnancy and birth experience by tuning to Meskhenet, a Goddess associated with the place of birth, and respect for her was essential for a normal birth (Crowther & Hall, 2015). The new brand of Pentecostalism also interferes with timely health care utilization as women see pastors, prophets and general overseers for special anointing when it comes to pregnancy and birthing. For Catholics, turning to the Virgin Mary and making novenas the least said about it the better.

Women who had a salaried job were more likely to be prepared for birth and its complications compared to women who were not employed at the time of the survey. This finding was comparable with the studies conducted in Southern Ethiopia and Uganda (Asp et al., 2014). This might be due to the fact that paid employment meant a greater likelihood of having cash that can be used to prepare for birth and its complications. Early and frequent antenatal care attendances are important to identify and alleviate risk factors in pregnancy and to encourage women to prepare for birth (Karkee et al., 2013).

The World Health Organization's account defines maternal health as the health of women during pregnancy, childbirth and the postpartum period (Campbell & Graham, 2006). Access to maternal health services is crucial in this study to ensure safe motherhood care before, during and after delivery. According to literature, access has four dimensions: availability, geographic accessibility, affordability and acceptability (Tura et al., 2014). Barriers to accessing health services can stem from the demand side and/or the supply side. Demand-side determinants are factors influencing the ability to use health services at individual, household or community level, while supply-side determinants are aspects inherent to the health system that hinder service uptake by individuals, households or the community (Ensor & Cooper, 2004). From the study, 89.6% of the participants in the Tamale Metropolis agreed that maternal health services such as laboratory services, blood bank services, HIV/AIDS/Hep B counseling services, theatre services and ANC etcetera were available at the facility they went to access care. On the other hand, respondents said there were also concurrent challenges accessing these services due to some intractable barriers. For instance, in the study, over 66.4% of the participants felt the judgmental attitude of health staff impeded access to maternal health services. This confirmed the assertion of Asp et al., (2014) that unwelcoming staff attitude or poor interpersonal skills as well as complex billing systems at hospitals, increased the difficulty of accessing services especially in developing countries. This could breed lack of trust by users in health care providers or the intermediates that link the population with these providers, making people reluctant to use the respective services. The study also revealed lack of means of transport especially ambulance service as a major challenge to accessing emergency health care as 72.1% agreed they could not access lifesaving care due to this challenge. Another barrier mentioned in this study was deplorable road network which 68.7% agreed had prevented them from accessing timely maternal health care services. These among others were the reasons why some pregnant women in this study could not access maternal care and delivered at home instead of the health facility. Those who were determined to seek emergency life saving care at all cost were also faced with some delays leading to late reporting.

In Ghana, as in many developing countries, deaths during pregnancy and childbirth are often

linked to the three delays: Delays in the home, delays in accessing the health facility and delays at the health facility (Asante, 2011). According to his report, the first delay is deciding whether to seek care or not. The report indicated lack of information and inadequate knowledge responsible for the delay in responding to initial warning signs of complications of pregnancy and danger signals during labour. Certain traditions and cultures in the country maintain that women must wait for approvals from male relatives before seeking help (Fischer, 2002). The second delay is linked to the constraints that women face in accessing health facilities. Weak referral linkages as pointed out exist between community, health centres and district hospitals making it difficult for women in emergency situations to get the care they need. The situation as mentioned is made worse by poor road and communication networks, distant health facilities, and a lack of transportation and inadequate community support (Ekabua et al., 2011). The third delay identified occurs between the time the woman arrives at the health facility and the facilities response in providing appropriate care. Facility preparedness to respond to obstetric emergencies is generally inadequate in terms of skilled attendants, equipment, supplies and drugs and motivated staff (Asante, 2011).

Every social group in the world has specific traditions, cultural practices, and beliefs and probing into religions further provided an understanding of a particular culture. Traditional culture played a major role in the way a woman perceived and prepared for child birth experience; this may positively or negatively affect the use of health care in general and maternal health in particular (Okka and Durduran, 2016).

In this study 62% of the respondents believed talismans offer protection to the pregnant woman and her unborn child against diseases and evil attacks, however 38% of the respondents disagreed to this assertion. The implication of this belief is modern ways of providing protection for pregnant women and their unborn babies such vaccination, taking vitamin supplements etcetera could be substituted with wearing mere talismans. Similarly, 54.8% of the pregnant women in this study agreed that no man other than the husband should see a woman naked in the process of giving birth as this could lead to obstructed labour. A similar study was done among Ethiopian Afar, where women stated

during a focus group that only God and their husband could see them naked (Tura et al., 2014). Pregnant women therefore, preferred consultation with local religious leaders, traditional healers, and traditional birth attendants (TBAs) where expectant mothers assumed autonomy to seeking care from qualified health providers. The danger here is that when there are obstructed labour issues these traditionally skillful birth attendants introduce local medicine (concoctions) to stimulate contractions. These concoctions, despite their long tested medicinal effects may also result in repeated and strong contractions leading to rupture of the uterus, a probable cause of maternal and new-born death (Iliyasu & Sabubakar, 2015). With respect to early announcement of pregnancy 67.6% of participants held the belief the practice could cause miscarriages while 32.4% disagreed. Respondents who believed in this normally start ANC visit late in order to protect their pregnancy against miscarriages (Craig, 2009). Furthermore, 57.6% of the study populace was of the view that unassisted birth is a mark of fidelity and bravery on the part of the woman as opposed to 42.4%. This is in line with a study conducted in Uganda that stated women felt embarrassed to give birth in a health facility because other members of the community would think they were not brave enough to give birth on their own (Kabakyenga et al., 2012). Child Birth therefore, represented a rare opportunity for a woman to demonstrate pride, courage, and bring honour to her and her husband's families by her stoic demeanor. The woman who managed to deliver without indication that she was in labour and without calling for assistance until the child was born was especially esteemed.

On the other hand, 84.6% of participants as opposed to 15.4% believed that for a safe delivery, a pastor or imam or traditionalist must be called in to recite special prayers for the woman in labour based on her faith for safe delivery. During obstructed labour, the pregnant woman was made by these unskilled birth attendants to mention the name(s) of the man or men she might have slept with during pregnancy and if she could not still deliver then she was made to go to the hospital. According to Fischer (2002) women have used prayer and other spiritual practices for their own and others' health concerns for thousands of years. This they believe is a prerequisite for safe delivery however this is a medium for deadly delays.

Conclusion

There were serious challenges accessing available maternal health services, delays in seeking emergency care as a result of cultural and obstetric beliefs concerning pregnancy and childbirth, lack of spousal and community support for pregnant women especially during emergency labour. These could contribute to the soaring maternal morbidity and mortality in the Tamale Metropolis rendering the frantic effort in combating maternal death by the Ghana Health Services, Ministry of Health and International safe motherhood organizations impotent. Maternal deaths in the northern part of Ghana could be reduced if qualified dedicated Nurses, Midwives and Doctors are ready to serve humanity in a professional manner. Logistics, and refurbishment, building of more hospital at least two in each district and the training of more health workers are necessities in order to adequately attend to patients timely. Until road networks in the country are properly constructed and accessible to all part of Ghana, the effort to reduce maternal mortality would be a mirage. Efforts to improve the health sector must also go hand in hand with education, without it all would come to square one. The Government indeed has a huge responsibility but individuals and cooperate entities equally have a role to play in this direction so that hopes would be restored.

References

1. Agarwal, S., Sethi, V., Srivastava, K., Jha, P. K., & Baqui, A. H. (2010). Birth preparedness and complication readiness among slum women in Indore city, India. *Journal of Health, Population and Nutrition*, 28(4), 383–391. <http://doi.org/10.3329/jhpn.v28i4.6045>
2. Agbodohu, D. A. (2013). *University of Ghana* <http://ugspace.ug.edu.gh>.
3. <http://doi.org/10.1016/j.molcel.2009.09.013>
4. Asante, A. E. (2011). An assessment of the effect of the free maternal care policy on the utilisation of maternal care services in the new juaben municipality
5. Byford-Richardson, L., Walker, M., Muckle, W., Sprague, A., Fergus, S., Rennicks White, R., & Dick, B. (2013). Barriers to access of maternity care in kenya: a social perspective. *Journal of Obstetrics and Gynaecology Canada : JOGC = Journal*

- D'obstétrique et Gynécologie Du Canada : JOGC*, 35(2), 125–30. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23470061>
6. Campbell, B., Martinelli-heckadon, S., & Wong, S. (2013). Motherhood in Childhood.
 7. Ensor, T., & Cooper, S. (2004). Overcoming Barriers to Health Service Access and Influencing the Demand Side Through Purchasing, (September).
 8. Fischer, M. (2002). Childbearing in Ghana : How beliefs affect care Childbearing in Ghana : How beliefs affect care.
 9. Hailu, M., Gebremariam, A., Alemseged, F., & Deribe, K. (2011). Birth preparedness and complication readiness among pregnant women in Southern Ethiopia. *PloS One*, 6(6), e21432. <http://doi.org/10.1371/journal.pone.0021432>
 10. Iliyasu, Z., Abubakar, I. S., Galadanci, H. S., & Aliyu, M. H. (2010a). Birth Preparedness , Complication Readiness and Fathers ' Participation in Maternity Care in a Northern Nigerian Community, 14(1), 21–32.
 11. Jacobs, B., Ir, P., Bigdeli, M., Annear, P. L., & Damme, W. Van. (2011). Addressing access barriers to health services : an analytical framework for selecting appropriate interventions in low-income Asian countries. <http://doi.org/10.1093/heapol/czr038>
 12. Karkee, R., Lee, A. H., & Binns, C. W. (2013). Birth preparedness and skilled attendance at birth in nepal: Implications for achieving millennium development goal 5. *Midwifery*, 29(10), 1206–1210. <http://doi.org/10.1016/j.midw.2013.05.002>
 13. Markos, D., & Bogale, D. (2014). Birth preparedness and complication readiness among women of child bearing age group in Goba woreda, Oromia region, Ethiopia. *BMC Pregnancy and Childbirth*, 14(1), 282. <http://doi.org/10.1186/1471-2393-14-282>
 14. Nawal, D., & Goli, S. (2013). Birth preparedness and its effect on place of delivery and post-natal check-ups in Nepal. *PloS One*, 8(5), e60957. <http://doi.org/10.1371/journal.pone.0060957>
 15. Skinner, J., & Rathavy, T. (2009). Design and evaluation of a community participatory, birth preparedness project in Cambodia. *Midwifery*, 25(6), 738–743. <http://doi.org/http://dx.doi.org/10.1016/j.midw.2008.01.006>
 16. Solnes Miltenburg, A., Roggeveen, Y., van Elteren, M., Shields, L., Bunders, J., van Roosmalen, J., & Stekelenburg, J. (2013). A protocol for a systematic review of birth preparedness and complication readiness programs. *Systematic Reviews*, 2(1), 11. <http://doi.org/10.1186/2046-4053-2-11>
 17. Soubeiga, D., Gauvin, L., Hatem, M. A., & Johri, M. (2014). Birth Preparedness and Complication Readiness (BPCR) interventions to reduce maternal and neonatal mortality in developing countries: systematic review and meta-analysis. *BMC Pregnancy and Childbirth*, 14(1), 129. <http://doi.org/10.1186/1471-2393-14-129>
 18. Tura, G., Afework, M. F., & Yalew, A. W. (2014). The effect of birth preparedness and complication readiness on skilled care use: a prospective follow-up study in Southwest Ethiopia. *Reproductive Health*, 11, 60. <http://doi.org/10.1186/1742-4755-11-60>
 19. WHO. (2015a). Ghana ; accelerating progress towards MDG5. *MMR Trends in Ghana*.
 20. WHO, 2015. (2015b). Maternal mortality fact sheet. *World Health Organization*.