Hindawi Advances in Public Health Volume 2019, Article ID 5487293, 11 pages https://doi.org/10.1155/2019/5487293



# Research Article

# Sociocultural Determinants of the Utilization of Maternal Health Care Services in the Tallensi District in the Upper East Region of Ghana

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Received 13 August 2018; Revised 27 December 2018; Accepted 22 January 2019; Published 10 February 2019

Academic Editor: Jagdish Khubchandani

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Introduction. The quality maternal health care that women receive during pregnancy and delivery is important for the health of both the mother and the baby. However, most pregnant women do not receive the minimum number of antenatal care (ANC) services (at least 4 times during pregnancy) as recommended by the WHO. This article sought to identify the types of maternal health care services (MHCS) received by women during pregnancy and delivery and after childbirth and women's reasons for use and nonuse of MHCS. Methods. The study adopted the social survey design where 366 women were sampled using probability sampling technique. The data was collected through the use of questionnaire. Results. The study results revealed that some sociocultural factors such as age, religion, traditional belief system, education, and marital status influence women's use of MHCS in the Talensi District. In addition, factors such as women's National Health Insurance Scheme status, distance to health center, and attitude of health care professional determine their utilization of MHCS. To a large extent, these factors influence choice for traditional birth attendants over biomedically-based maternal health care services. Conclusion. The study recommended that there should be education for women on the need for them to utilize MHCS during pregnancy and delivery and after childbirth. Government should organize skill training for traditional birth attendants in the Talensi District.

#### 1. Introduction

The health services that pregnant women access play a significant role in preventing complications which lead to death or deformity [1]. In 2000, 189 independent states adopted a roadmap outlining some worldwide Millennium Development Goals (MDGs) now known as Sustainable Development Goals (SDGs) that were to be realized by the end of 2015 [2]. Improved Maternal Health (MDGs5) was one of the key goals for all nations and now Sustainable Development Goals 3 which emphasizes good health and well-being for all [3].

Despite progress in reducing maternal mortality world-wide, Sub-Saharan Africa had the highest maternal mortality in the world [4]. The proportion of women who died are 510 deaths per 100,000 live births in Sub-Saharan Africa, Southern Asia is second to Africa, the Oceania, with the

Caribbean having 190 maternal deaths per 100,000 live births, and the least among the less developed nations is the South-Eastern Asia [5, 6]. Pregnancy and delivery are essential events in human life; it is therefore important to pay special attention to women during pregnancy [7]. Women's ability to seek health service during pregnancy will ensure that maternal mortality rate (MMR) is reduced in childbirth, mostly in many African nations where 51.2% of maternal mortality may be occurring [8].

Across Sub-Saharan Africa, low wages, poor livelihood, poor nutrition, poor health service location, inadequate workers in the health field, poor road network, and other factors put women at high risk during pregnancy [9, 10]. Many pregnant women seek orthodox systems or the traditional health system (herbal medicine) in rural areas due to their condition [11]. Women's choice to use maternal health service from orthodox and/or traditional herbal medicine poses a

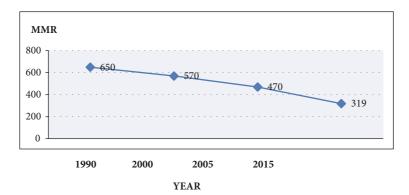


FIGURE 1: MMR trends in Ghana, 1990-2015. Source: Millennium Development Goals Report [5].

TABLE 1: Trends in maternal health indicators by residence in Ghana 1993-2014.

Maternal Health Indicator			Urban					Rural		
	1993	1998	2003	2008	2014	1993	1998	2003	2008	2014
Antenatal	83.2	84.5	84.3	98	93	81.5	85.2	61	94	82
Supervised Delivery	79.3	75.7	78.6	84	90.9	28.0	33.1	29.6	43	58.9
Post-natal	64.7	52.7	59.7	83	87.1	26.8	42.4	44.1	59	70.7

Source: GDHS, 1993, 1998, 2003, 2008, and 2014.

challenge to the efforts of government and its partners in maternal mortality reduction through the use of maternal health care services [12, 13].

In most rural communities in Ghana where there are limited maternal health care services, traditional birth attendants (TBAs) serve as MHCS providers to women especially during delivery [14]. These are untrained health professional who do not have any formal education and have not attended any recognized health training institution for training as health professionals. Their operations are largely based on the use of traditional herbal medicine.

In the specific case of Ghana as other African countries, maternal mortality remains high and constitutes one of the development issues that the country is currently facing [15]. A large number of women in Ghana die annually due to pregnancy related complications considered preventable such as severe bleeding, hypertension, sepsis infections, and unsafe abortion [16]. The Millennium Development Goals (MDGs) 5 has the target of reducing the maternal mortality ratio (MMR) by three-quarters between 1990 and 2015.

Although there has been a significant reduction in national maternal mortality ratio since 1995 from a high of 650 maternal deaths per 100,000 live births in 1990 to 319 maternal deaths per 100,000 live births in 2015 [5], the reduction fell short of the 185 per 100,000 live births expected to be achieved in the MDG 5 target by 2015 as can be seen in Figure 1.

One of the key strategies for reducing maternal mortality ratio is ensuring access to and utilization of maternal and child health services [17]. Some of the key interventions which have been introduced by government to enhance access to maternal health care service include the implementation of free maternal health care services, linking a maternal clinic and child welfare clinic in each district, training of

individuals in safe motherhood skills, abortion care, and lactation management [18]. Other policy initiatives by the government and the Ghana Health Service include the implementation of emergency obstetrics and neonatal care in all ten (10) regions in Ghana, ensuring care provided by skilled professional during pregnancy and childbirth, and lastly strengthening the MDGs accelerated framework (MAF) initiative to boost activities related to reducing maternal mortality rate [19].

These policy interventions have to some extent reduced maternal mortality, but the national MMR target of 187 in every 100,000 childbirths by 2015 remains unachieved within these frameworks of interventions provided by the government as the current national MMR is 319 [5]. Table 1 provides data for selected maternal health indicators regarding urban and rural use of maternal health care services from the national perspective.

The trends in maternal health indicators showed that there has been some increase in women's use of maternal health care services from the national perspective. However, comparing data on women's use of MHCS in urban and rural localities in Ghana showed that there has been uneven distribution in urban and rural women in terms of access and use of maternal health care services. The indicators have been performing poorly in rural areas compared to urban areas. It is against this backdrop that this study reviewed utilization of maternal health care services in the Talensi District, a rural district in the Upper East Region of Ghana. The estimated population of the district is 34,700 women [20]. As a rural district, the lives of the people including their health seeking behaviour are greatly influenced by cultural and traditional beliefs of the area though the Catholic Church has a strong presence in the district. The issue here is as follows: what are the socioeconomic determinants that account for women's

use or nonuse of maternal health care services in the rural areas in Ghana where the traditional culture remains strong? Finding answers to this question would help stakeholders to put in place appropriate policies and programme to improve access to quality maternal health care services as one of the solutions to the persistent relatively high maternal mortality rate in Ghana. This is because the decision of a woman to use or not to use maternal health care services during pregnancy and labour and after childbirth has positive or negative implications for maternal mortality rate. To answer this question, the study looked at what options are available to pregnant women if they decide not to use antenatal and delivery care services in the hospital and the reasons that informed their decision.

The theoretical underpinning of this article is the Social Learning Theory as postulated by Bandura [21] which is based on the premise that people learn behavior from the social environment in which they find themselves. The Social Learning Theory helps explain the health seeking behavior of women when it comes to the utilization of maternal health care services during pregnancy and childbirth. Thus, the Social Learning Theory is useful in explaining how women can acquire new maternal health care services seeking behaviours by looking at what other people in their community and locality do. The emphasis here is on how women can learn from others in terms of use of available maternal health care services. For instance, in the case of young women, they could learn from older women in the family regarding the MHS women often use and that can influence young women's behaviour in terms of MHS utilization or nonutilization. The study contends that most women in their quest to use maternal health services tend to learn from past experience of older women as well as what behaviour is acceptable by the larger society during pregnancy and childbirth. The study objectives were the following: to identify women's place of delivery in rural communities, sources and types of maternal health care services received by women, and the reasons for use and nonuse of maternal health care services by rural women.

#### 2. Methods

The study adopted the social survey design where probability techniques, specifically cluster and systematic, simple random sampling techniques, were used to sample women in the 11 towns within the Talensi District. Quantitative data collection approach was used. This was done to ensure that major variables were measured numerically and also to provide statistical information on factors which influence women's use and nonuse of MHCS. It also helped to describe, explain, and predict women's use of MHS in the Talensi District. The quantitative approach helped in gathering empirical data to give readers and policy makers an understanding of women's use and nonuse of MHCS using quantifiable data.

2.1. Data Collection and Research Instrument. The primary data was collected directly from the field through the use of questionnaire. To ensure objectivity, validity, and reliability of

the study results and for the purpose of quantitative analysis, the key variables of study were operationalized for easily observable and empirical indicators of concepts used in the study.

The study involved women in fertility age (WIFA) (15-49 years) within the Talensi District. Thus, women who were pregnant and had given birth in the last five years were sampled for the study because it was assumed by the researchers that they could recollect their experiences in accessing maternal health care services during pregnancy and childbirth. More importantly their views on the study would help the researchers answer the central question which has been posed above in this article.

The study adopted cluster sampling, systematic and simple random sampling techniques in selecting the respondents because the study was carried out across the whole district. In the first place, the district was put into three clusters: Tongo East, Tongo Central, and Tongo West. Out of these clusters, the electoral areas used by the Ghana Electoral Commission were used as the sampling frame for each of the clusters. Through simple random sampling, two electoral areas were randomly selected from each cluster (making six electoral areas in all). Once the electoral areas were selected, the systematic sampling technique was used to select houses within the selected electoral areas. The first compound house in each electoral area was selected and the households in the compound house were used as the next sampling frame for the study. Women within the target population were randomly selected based on the number of households in each compound house. After the first compound house, the researchers counted to the next fifth house for selection and the households formed the next sampling frame as done in the first house. This was repeated until the required numbers of houses and respondents were selected from each cluster.

In all, 366 women were selected for the study. This sample size was reached based on the proportion of women who used maternal health care services in the Talensi District which is 0.39: at 95% (z=1.96) level of confidence and a margin of error 5% (d=0.05).

For those respondents who could read on their own, the questionnaires were given to them to answer for a period of two weeks. The researchers returned for the completed questionnaires from the respondents at an appointed date and time (two-week period). The majority of respondents could not read or write on their own; therefore the researchers read to them and their responses were recorded on the questionnaires. The questionnaire was read to the women in the local language and their responses were translated into English language. The return rate of the questionnaires administered was 100%. The data collection took a period of one and half months as the study covered the entire district.

2.2. Data Management and Analysis. The variables were coded for the analysis. Each response was assigned a numeric code. For example, a variable such as marital status was coded as 1=single, 2=married, 3=divorced, and so on. After coding the variables, each questionnaire was edited to ensure that all the questions were answered. Earlier on, editing was done

during the field work to ensure that questionnaires that were not fully completed were replaced. Thus, respondents who did not provide complete responses to the questionnaires were replaced with other respondents. This was done to avoid missing values and to ensure that all variables had responses. The next stage for data management was data entry. Here, the coded data was transferred into the Statistical Package for Social Sciences (SPSS) version 16. Once the data was entered into the SPSS, there was data cleaning where all wild codes and errors were eliminated. This was done by first running frequencies on each variable. The final stage of data processing was data modification. Here, variables that needed to be recoded were done to match with the approach for analysis and application of appropriate statistical techniques. The data was analysed using quantitative approaches such as frequency tables and subsequently described for the understanding of the readers.

2.3. Ethical Consideration. All the stakeholders, District Health Directorate, District Health Management Team, health facilities, and respondents were given full information about the study before the data was collected. Respondents were also given the option to withdraw from the study at any stage during data collection if they so wish without any negative consequences. This was done to seek for the respondents' consent before data collection. Ethical clearance was also obtained from the Talensi District Health Directorate and health facilities before data collection. Respondents and the families were also assured of confidentiality in data handling. Thus, the study avoided identifiers, information was stored in lockers, and password was used to protect the documents. They were also assured of anonymity in the publication of the research findings.

#### 3. Results

3.1. Sociodemographic Characteristic of Respondents. The study found that, out of 366 respondents, the majority of them (63.1%) were married with few respondents (only 3.6%) being in cohabitation relationship and 15.6% singles. The age range of 31-35 years constitutes a highest percentage of 28.1% (n=103). This was followed by those in the age range of 26-30 years with percentage of 24% (n=88). Respondents in the age range of 46-49 years formed the minority group with a valid percentage of 4.4% (n=16). The study revealed that most of respondents, 47% (n=172), had no formal education. At least 24% (n=88) had only basic/primary education and 20.5% (n=75) had junior high education (middle school), respectively. The study established that the proportion of the female educated elite was very low. Most of them 47.8% (n=175) were traditional believers, followed by 43.4% (n=159) of the respondents being Christians and 7.4% (n=27) of the respondents being Muslims. Most women involved in the study (34.4%; n=126) indicated that they were farmers, 27.9% (n=102) of the respondents were unemployed, 21.6% (n=79) of the respondents were dress makers and hair dressers, and 11.2% (n=41) of the respondents were traders. Only 3% (n=11) and 0.8% (n=3) of the respondents were teachers and

nurses, respectively. It was established that 23% (n=84) of the respondents had only one child. Only 13.4% (n=49) of the respondents had two children. Most respondents had three children or more as the study recorded 18.6% (n=68) with three children, 26% (n=88) with four children, 9.8% (n=36) with five children, and 5.7% (n=21) with six and more children as depicted in Table 2.

3.2. Place of Delivery Care. Most respondents (52.7%) delivered their first child at home; 42.1% (n=154) of the women delivered at the hospital with 5.2% (n=19) of the women delivering at the clinic. See Table 3 for the details on place of delivery. For sequence of childbirth (second, third, and last child), the study found more deliveries at home than hospital/clinic. Yet, most respondents delivered their third born child at hospital. With regard to the second birth for most women who had more than one child (two children), the women who delivered at home (47%) outnumbered those who delivered at hospital (27.8%) and clinic (2.2%). The study further established that only 37.7% (n=138) women delivered their third child at the hospital, with majority of the respondents (63.9%) indicating that they delivered their last childbirth at home. A general scrutiny of women's place of delivery in the Talensi District according to the field data showed that most women still deliver their babies at home. It is worth noting that a significant proportion, 4 out of every 10 women, had had their first birth at the hospital/clinic. These high percentage deliveries at home could be explained by the availability of traditional birth attendants and the lack of health care centers and health care professionals in most villages within the study area; the Talensi District Report (2012) from the Ghana Health Service showed that the area lacked health centers and health personnel [20].

3.3. Antenatal Care (ANC) Received during Pregnancy. Majority of the participants responded in the affirmative when asked whether they were weighed during their last pregnancy. Out of 366 respondents, 97.3% (n=356) indicated that their weights were measured when they visited the health center for ANC. Few respondents did not know as to whether their weight was checked or not. On the measurement of blood pressure, 95.6% (n=350) of the respondents again indicated in the affirmative that their blood pressure was checked during ANC. Similarly, 98.4% (n=353) respondents stated that their urine was tested while 88.5% (n=324) indicated that they had tetanus injection during ANC.

The study found that some types of ANC services received by women within the study area during pregnancy were women's weight measurement, blood pressure test, urine sample test, and tetanus injection as indicated in Table 4. The study found that 71.6% of women at least received some form of ANC during pregnancy. It was also noted that a high percentage of respondents could mention the type of ANC services received during their last visit for ANC services.

3.4. Health Professionals (Who Assisted Respondents) Assistance during Delivery. The person who assists women during

Table 2: Univariate analysis: sociodemographic characteristic of respondents.

Variable/Categories	Frequency n=366	Percent %
Marital status		
Single	57	15.6
Married	231	63.1
Divorced	25	6.8
Widow	40	10.9
Cohabitation relationship	13	3.6
Age group		
15-20 years	51	13.9
21-25 years	57	15.6
26-30 years	88	24.0
31-35 years	103	28.1
36-40 years	32	8.7
41-45 years	19	5.2
46-49 years	16	4.4
Age at last birth (within past five years 2011-2015)		
less than 20 years	62	16.9
21-25 years	64	17.5
26-30 years	140	38.3
31-35 years	75	20.5
36-40 years	15	4.1
41 years and above	10	2.7
Level of education		
No formal education	172	47.0
Basic/primary level	88	24.0
Junior high level	75	20.5
Senior high level	20	5.5
Tertiary level	11	3.0
Religious affiliation		
Christianity	159	43.4
Muslim	27	7.4
Traditionalist	175	47.8
Free thinkers	5	1.4
Occupation		
Unemployed	102	27.9
Farmer	126	34.4
Teacher	11	3.0
Nurse	3	0.8
Dress/hair maker	79	21.6
Trader	41	11.2
Students	4	1.1
Number of children		·
One child	84	23.0
Two children	49	13.4
Three children	68	18.6
Four children	88	26.0
Five children	36	9.8
Six and more children	21	5.7

Source: Authors' Field Work, December, 2016.

Table 3: Place of delivery care.

Place of delivery		Frequency n=366	Percent %
	Home	193	52.7
First child	Hospital	154	42.1
	Clinic	19	5.2
	Home	172	47.0
Second child	Hospital	102	27.8
	Clinic	8	2.2
Not app	licable	84	22.9
	Home	94	25.7
Third child	Hospital	138	37.7
	Clinic	1	0.3
Not app	licable	133	36.3
	Home	234	63.9
Last child	Hospital	119	32.5
	Clinic	13	3.6

Source: Authors' Field Work, December, 2016.

delivery is important in preventing and handling complications that may occur during childbirth. The study found that about 37.2% of women were assisted by untrained traditional birth attendant during delivery. A significant number of the respondents had assistance from a midwife during their last childbirth. Only 1.4% of the respondents had assistance from doctors during their last delivery. Likewise, 23.2% (n=85) of the respondents indicated that they were assisted by nurses during their last delivery. Combining the respondents who had assistance from doctors, midwives and nurses, and community health nurses together, the total percentage of respondents who had assistance from medical professionals during their last childbirth was 56.8%. This implied that the majority of the respondents had assistance from medical professional during their last delivery as shown in Table 4.

3.5. Types of Maternal Care Received during Last Pregnancy. About 22.7% (n=83) of respondents indicated that the type of maternal health care services (MHCS) received by women during their last pregnancy was laboratory tests or medications, 32.5% (n=119). Another 35% (n=128) received both laboratory test and medication as MHCS during their last pregnancy as shown in Table 4.

3.6. Hospital/Clinic Respondents Access Maternal Health Care Services during Last Pregnancy. Most women in the Talensi District access health care services from the Tongo Health Center. Out of the total 366 women involved in the study, 65% (n=238) indicated that they access medication from the Tongo Health Center, which is the district hospital. The second highest hospital where women access MHCS was the Pwalugu Health Centre (14.8%, n=54). The Datoku Clinic recorded the least attendance of 2.7% (n=10) in terms of women's access to services when pregnant.

3.7. Reasons for Women's Nonuse of MHCS. The study sought to identify why some women may fail to use MHCS during

pregnancy and delivery. The study found that availability of traditional healers was the most significant factor for women's nonuse of maternal health care services with  $\overline{x}$ of (1.63), whilst season/time of pregnancy was the least significant reason for women's nonuse of maternal health care services ( $\bar{x} = -1.06$ ). The study also established that the cost involved in accessing health care services during pregnancy was a significant determinant of women's nonuse of maternal care services with  $\overline{x}$  value of (1.26) which is >1 but <2. This implies that a significant number of women in the district do not use maternal health care services due to cost. Respondents explained that they pay between GHC 50 and 100 per visit for antenatal services. The third most common reason for women's nonuse of maternal health care services was availability of traditional birth attendants (TBAs) in the district with  $\overline{x}$  value of (1.10). The next reason for women's nonuse of maternal health care in the district was distance to health care center. This recorded  $\overline{x}$  value of (1.01) which implied that a significant number of women consider distance as an obstacle to accessing maternal health care services. Other significant reasons cited by women for nonuse of maternal health care services were lack of health professionals ( $\overline{x}$ =0.99), attitude/behaviour of health staff ( $\overline{x}$ =0.98), and lack of health centers ( $\overline{x}$ =0.76). Women also attach less significance to quality of health services provided ( $\overline{x}$ = 0.0.58) and lack of knowledge on the importance of maternal health care services ( $\bar{x}$ = 0.55); both recorded  $\overline{x}$  values of >0 but <1, which implied that a significant number of women consider lack of health profession, attitude/behaviour of health staff, and lack of health centers as reasons for them not using maternal health care services in the district.

The less significant reasons for nonuse of maternal health care services in the Talensi District according to the women were the nature of work women do ( $\overline{x}$ = -0.91), genetic/biological reasons ( $\overline{x}$ = -0.56), religious belief ( $\overline{x}$ = -0.39), and time spent at the health center ( $\overline{x}$ = -0.37) and partners do not support their use of the services ( $\overline{x}$ = 0.36).

TABLE 4: Sources and type of maternal health care services received by women.

Variable/categories		Frequency n=366	Percent %	
ANC during pregnancy	37	0.00	F1 6	
Utilization of ANC during pregnancy	Yes		71.6	
	No		28.4	
XA7-:-11	Yes		97.3	
Weighed measurement	No		1.1	
	Don't know		1.6	
Pl 1	Yes		95.6	
Blood pressure measurement	No	262 104 356 4 6 350 4 12 353 4 9 353 4 9 324 4 38 5 116 85 2 16 136 6	1.1	
	Don't know		3.3	
	Yes		96.4	
Urine sample test	No		1.1	
	Don't know		2.5	
	Yes	353	96.4	
Blood sample test	No	4	1.1	
	Don't know	<u> </u>	2.5	
	Yes	324	88.5	
Tetanus injection	No	4	1.1	
	Don't know	38	10.3	
Health professionals who assisted responde	nt during delivery			
Doctor		5	1.4	
Midwife		116	31.7	
Nurse		85	23.2	
Community health nurse		2	.5	
Trained traditional birth attendant		16	4.4	
Untrained traditional birth attendant		136	37.2	
None		6	1.6	
Types of maternal care received during last	pregnancy			
Lab test only		83	22.7	
Medication only		119	32.5	
Lab test and medication		128	35.0	
No responses		36	9.8	
Hospital/clinic respondents access materna	l health care services during	g last pregnancy		
Tongo Health Centre		238	65.0	
Pwalugu Health Centre		54	14.8	
Winkogo Community Clinic		37	10.1	
Datoku Clinic		10	2.7	
Namologo Clinic		18	4.9	
Not applicable		9	2.5	

Source: Authors' Field Work, December, 2016.

These factors had  $\overline{x}$  values of less than one, implying that these were less significant in women's nonuse of maternal health services as shown in Table 5.

3.8. Reasons for Women's Use of Maternal Health Care Services. The study also assessed the reasons for women's utilization of MHCS. It was found that women's usage of maternal health care was based on a number of factors. A greater portion of women use MHCS because the service provided is free  $(\overline{x}=1.04)$ . The least significant determinant factor for women's

use of MHCS was cost ( $\overline{x}$ = -0.39). This implies that though maternal health care is free, cost does not prevent women from using MHCS.

The study further found that other significant factors for women's use of MHCS were the need for good health ( $\overline{x}$ =0.98), knowledge on the need/importance for maternal health care ( $\overline{x}$ =0.95), availability of health services ( $\overline{x}$ =0.61), and attitude of health staff ( $\overline{x}$ =0.47). See Table 6.

Equally, the study established that a factor such as the availability of health professionals was a less significant reason why women use MHCS in the district ( $\bar{x}$ = -0.29).

TABLE 5: Reasons for women's nonuse of maternal health care services.

STATEMENT	SD-2	D-1	U0	A1	SA2	Mean $(\overline{x})$	Std. Dev.
Availability of traditional healers	5	16	10	37	271	1.63	0.301
Lack of knowledge on the importance of maternal health care services	2	32	40	230	18	0.55	0.237
Attitudes/behaviour of health staff	21	47	45	36	194	0.98	0.184
Distance covered to access maternal health care services	23	26	49	65	173	1.01	0.164
Cost involved in access to health services (average GHC 50-100 per ANC visit)	4	25	47	60	193	1.26	0.202
The work you do	125	60	88	27	3	-0.91	0.143
Religious beliefs	27	142	77	40	18	-0.39	0.149
Season/time of pregnancy	81	116	8	22	5	-1.06	0.191
Availability of traditional birth attendant (TBAs)	20	51	12	26	207	1.10	0.231
Lack of health center	26	25	10	150	70	0.76	0.181
Lack of health professional	40	28	13	22	187	0.99	0.224
Time spent at the health center	30	95	106	30	12	-0.37	0.139
Partner does not support the idea	24	30	46	155	10	0.36	0.197
Genetic/biological reason	43	51	117	12	0	-0.56	0.183
Quality of service provided	36	3	7	210	17	0.58	0.288
Total average $(\overline{x})$						0.39	

Source: Authors' Field Work, December, 2016.

TABLE 6: Reasons for women's use of MHCS.

STATEMENT	SD-2	D-1	U0	A1	SA2	Mean $(\overline{x})$	Std. Dev.
Attitude of health staff	36	34	33	96	67	0.47	0.0933
Knowledge on the need for maternal health care	25	51	12	56	173	0.95	0.214
Need for good health	14	38	7	133	121	0.98	0.200
Free maternal health care	22	35	14	68	162	1.04	0.201
Quality of health care service	44	45	57	108	54	0.26	0.088
Nearness of health center	42	53	16	110	81	0.45	0.119
Available health professional	101	52	21	96	34	-0.29	0.118
Availability of health care service	37	48	37	51	126	0.61	0.123
Cost of maternal health service	67	130	11	30	59	-0.39	0.148
Total average $(\overline{x})$						0.45	

Source: Authors' Field Work, December, 2016.

This suggests that women do not use MHCS in the district because of the nonavailability of health professionals as Talensi District Health statistics showed that there is a general lack of health professionals in the area. Women attach less consideration to the nearness of a health center ( $\overline{x}$ =0.46) and quality of health care services ( $\overline{x}$ =0.26) in their use of MHCS. The reason for this was that the health care centers in the area were far from most respondents' place of residence. The women did not have many available health care centers to compare and determine quality to help them access MHCS. Hence, these factors were of less significant determinants in their use of MHCS.

#### 4. Discussion

Analysis of the data presented indicates that there are a number of social and cultural factors which determine a woman's decision to access maternal health care services in the hospital. The key factor is the preference of most women in this study to use the services of traditional birth attendants (TBAs) and in some cases herbalists notwithstanding the availability of relatively safe maternal health care services in the study area. The TBAs are generally older women in most rural communities who have learned to provide some "traditional" maternal health care service through multiple childbirths spanning over many years. Some of the TBAs

have also learnt how to attend to pregnant women from their mothers, grandmothers, or other older women in their families or communities. In addition, their services are "traditional" because the TBAs are mostly uneducated and are staunch believers in traditional customary practices in relation to women's health in general.

However, in some Sub-Saharan African countries including Ghana, the Ministry of Health and its implementing agencies have seen the crucial role TBAs play in providing maternal care services to women during pregnancy and childbirth outside of the formal hospital setting. As a result, some TBAs have been trained in basic hygiene and other related basic maternal health care services so they can provide first aid to women when they are pregnant and during labour. Training of TBAs was also meant to enable them identify complicated pregnancy and childbirth cases in time and be able to refer them to the hospital for the necessary medical attention

In this regard, the WHO [8] defines trained TBAs as individuals within the community who assist women in maternal care and have learned their skills through apprenticeship which mostly involves informal training on how to take care of pregnant women, conduct deliveries, and provide potential services. As a result, trained TBAs are often distinguished from untrained TBAs. In this study, however, the TBAs who are often consulted by the respondents are mostly untrained as per the WHO [8] definition stated above and this has implications for the quality of services such TBAs provide.

There is no doubt that TBAs play an important role in providing "traditional" maternal health care in poorresource settings in many Sub-Saharan African countries, including Ghana, where there is a general lack of health care professionals as similarly indicated by Gage [22]. It is for this reason that in some context a traditional birth attendant (TBA) is also known as a traditional midwife, community midwife, or lay midwife, a pregnancy and childbirth care provider. Traditional birth attendants provide the majority of primary maternity care in many developing countries and may function within specific communities in developed countries. Traditional midwives provide basic health care, support, and advice during and after pregnancy and childbirth, based primarily on experience and knowledge acquired informally through the traditions and practices of the communities where they originate [23].

The preference for untrained TBAs by the majority of the women as opposed to utilizing maternal health care services at the hospital is largely informed by TBAs traditional approach in attending to women. It was noted that most respondents preferred their babies to be delivered by TBAs. This is mainly due to the fact that the TBAs are indigenes of the study area; they share the same traditional beliefs as the respondents when it comes to issues on how a pregnant woman or a pregnant woman in labour should be handled and treated. In other words, TBAs are sensitive to certain cultural practices which are accepted by the people in the study area in relation to pregnancy and childbirth.

For instance, a TBA in the study area would not hesitate to consult a fetish priest of deity in the area on behalf of a pregnant woman for explanation in the event that a pregnant woman goes into prolonged labour. The outcome of such a consultation at a deity could attribute the prolonged labour to the displeasure of the small gods or ancestors of the woman following a "sin" committed against the husband or some wrong doing committed against another person. Therefore, the pregnant woman might have been cursed with prolonged or obstructed labour by the one she wronged or might have sinned against. In such cases, some rituals could then be performed by the TBA or the relatives of the pregnant women to appease the small gods, ancestors, or whoever the pregnant woman might have wronged. However, this approach of trying to safely deliver a pregnant woman of her baby by the TBA cannot be done in a hospital where every aspect of the service is based on a scientific test rather than resorting to spiritual explanation.

Another sociocultural determinant that influences a pregnant woman's preference for a TBA over a health professional is that the local women trust the TBAs as old women they know very well and have been living with in the same community for many years. It is obvious that, in matters of health care delivery and use of health services, the element of trust is very paramount since the mere presence of a client or patient in the hospital setting to use health services borders on trust. However, pregnant women in some cases do not trust health workers because they suspect them not to be confidential about their health data. Such pregnant women would prefer to use the services of TBAs especially during childbirth instead of delivering of their babies at a health facility.

Moreover, the choice of TBAs over hospitals and health centres by the pregnant women in the study could also be driven by the often held position that it is always better to start from the known or familiar to the unknown or unfamiliar and not the vice versa. So, to the women in this study, most of them feel "comfortable" or "safe" in accessing the services of TBAs, some of whom are their relatives, rather than going to nurses and other health professionals they might not know at all and cannot be rest assured that they would communicate and relate to them well.

It follows that a study conducted in northern Ghana showed that TBAs in Yendi are responsible for delivering pregnant women of their babies in the localities in which they find themselves and beyond. The traditional role of TBAs has mainly been child delivery. After childbirth they are responsible for bathing the child for at least a month and thereafter the nursing mother takes over. The TBAs are required to serve as health intermediaries between their community members and the orthodox health sector with responsibility of educating women on breast feeding, family planning, maternal care, identification of women at risk during labour, and arrangement for referral to health facilities [24].

In addition, some pregnant women decided to allow TBAs to deliver them of their babies since in large part their human relation is better than that of health workers. In this present study, some women indicated that they were not happy with the attitude and behaviours of health workers when they visit the hospital or clinic. Similarly, Darko [25]

observed in a study that clients of TBA services emphasized that they still prefer to deliver at the TBAs place because of their good human relation. It was found that there is a good, cordial, and friendly relationship between TBAs and their clients because they may be family relations and above all they live together in one community.

Further, the TBAs are always available in the communities where they operate and are therefore easily accessible. As noted earlier, the TBAs are old women who are virtually at home either tending to their grandchildren or engaged in activities that do not take them too far away from their homes. Though the main occupation of the people in the study area is farming, it is often practiced by able-bodied men and women who are relatively younger. Therefore, TBAs are always available at home and are readily accessible by women who might need their services at any time of the day. This observation is in line with the responses of study participants in the data presented to the effect that they do not use maternal health care services in the hospital and other health facilities because they are far from where they live. Thus, distance as a barrier to the use of services in health facilities is not a constraint with the use of TBA services in the community.

It is worth noting that the issue of transportation cost in terms of travelling to and from a health facility to access health care in the district capital or a health facility in another community is not associated with the use of TBA services. In most cases, the TBA resides in the same community with the pregnant women or perhaps the TBA stays in the same compound with the pregnant woman. As a result, a pregnant woman might just need a walk past a couple of houses to see the TBA for attention. If the TBA stays in the compound with the pregnant women, then she would be attended to in the same place. It is also common for the TBA to be called to a pregnant woman's house to attend to her during labour if she cannot walk to the house of the TBA for assistance. In all of these instances, the TBA would be willing to attend to the pregnant woman at little or no cost to the pregnant woman and her family. The scenarios explained here cannot be easily associated with the uptake of services in a health facility where doctors, midwives, and nurses are always busy to leave the hospital or health centre to attend to a pregnant woman in labour in her house in the community. For most of the respondents, though the utilization of maternal health care services in the health facility is safer, the pull factors of tradition make the use of TBAs more attractive. Consequently, the push factors of modern medicine and its reliability in terms of quality care seem unattractive to the pregnant women who want to be delivered of their babies at home. When TBAs deliver pregnant women of their babies, they mostly simply show appreciation for the TBAs services with items such as fowls, foodstuffs, or other commodities that are produced in the community. Besides, a family delegation of the woman the TBA attended to can be sent to go and thank the TBA for the service provided. The TBAs often accept such payments in kind and other courtesies extended to them by pregnant women they deliver their babies.

#### 5. Conclusion

The traditional nature of the study area (Talensi District) coupled with the high availability of traditional healers, fetish priests, traditional birth attendants, and to some extent cost and distance to health centers accounted for women's limited use of maternal health care services and therefore their preference for the services of TBAs. It follows that such a low uptake of maternal health care services by pregnant women could have negative implications for Ghana's ability to meet the MDG 5 which enjoins all third world countries to reduce maternal mortality by half by 2020 through the provision of quality maternal health care services. It is for this reason among others that it is recommended that the Government of Ghana through the Ghana Health Service needs to train more TBAs in many rural areas in its effort to make pregnancy and childbirth much safer for women in line with the Millennium Development Goal 5. More importantly, the government should increase the availability of health care facilities across the country so as to improve access for pregnant women in every part of the country. The future implication of women's nonuse of MHCS in rural areas is that achieving the Millennium Development Goal 5 will be challenging if issues of women's nonuse of MHCS are not properly addressed in rural areas.

## **Data Availability**

Related data for the article can be provided on demand. These are mainly questionnaires interviews done and put on the SPSS programme and analyzed. These can be made available at any time when demanded.

#### **Conflicts of Interest**

The authors declare that they have no conflicts of interest.

#### **Authors' Contributions**

John Onzaberigu Nachinaab was the researcher and drafted the manuscript. Jonathan Mensah Dapaah and John Onzaberigu Nachinaab reviewed and finalised the manuscript.

### Acknowledgments

The authors would like to express their gratitude to all women in the Talensi District in the Upper East Region, Ghana, who participated in the study and answered the many questions the authors asked. The authors also thank all the health workers of the health facilities who helped to translate the interviews for some of the women at their premises.

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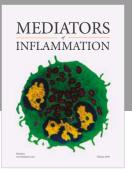
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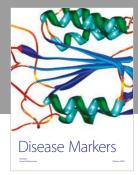
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