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Social and Cultural Drivers Affecting The Uptake Of Maternal and Newborn Health Care Services Among Women in Their Reproductive Age in The East Mamprusi Municipality

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ABSTRACT

Introduction: Socio-economic and cultural factors affect the use of basic maternal and newborn health care services among women in their reproductive age in Ghana. Yet, little is known about women's choice of such preferences. This study was conducted to assess social and cultural factors that affect the uptake of maternal and newborn health care services among women in their reproductive age in the East Mamprusi municipality of Ghana.

Material and Methods: The study employed a descriptive cross-sectional study design using simple random sampling technique to sample the respondents at the study setting. Structured questionnaire of a question about knowledge, cultural factors, and social factors were used to collect the data. The collected data was filled on cleared for completeness and analysed using Statistical Package for Social Science Windows version 25.0 and Microsoft Word Excel 2016.

Results: 81.5% mentioned that husband determined when ANC should be initiated. It was also revealed that, pregnant women preferred to be attended to by TBAs as compared to nurses. From the results, 89% of the respondents considered distance to access maternal and newborn care services as a social factor affecting maternal and newborn care. From the results, respondents who were staying more than 2 km away from a health centre were 2.26 times more likely to be knowledgeable on social factors that affects maternal and newborn health care services as compared to those who were staying less than 2 km away from a health centre [COR = 2.26 (95% CI 2.11, 24.88); p = 0.152].

Conclusion: Cultural and social factors affect women use of maternal and newborn health care.

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INTRODUCTION

Worldwide, about 70% of maternal fatalities result from five primary complications (direct obstetric complications): hemorrhage (25%), infection (15%), complications from unsafe abortion (13%), hypertension (12%), and obstructed labor (8%). This problem may arise at any point during pregnancy and childbirth, frequently without prior indication, necessitating prompt access to emergency obstetric care for management [1]. The World Health Organization (WHO, 2024) [2] report estimated that approximately 74% of maternal fatalities could be prevented if all women of reproductive age had access to interventions that mitigate complications of pregnancy and childbirth, particularly emergency obstetric care in predominantly rural areas [3].

Studies examining maternal morbidity and mortality in developing nations have consistently advocated for the provision of antenatal care and the presence of trained personnel to assist women during labor and delivery in health care facilities to avert complications [4]. Social factors have been found as influencing the health-seeking behaviors of women of reproductive age for maternity and neonatal health care services across sub-Saharan Africa. The utilization of maternity and

newborn health care services by women of reproductive age manifests in several phenomena. It manifests in many physical locations and social circumstances, encompasses a diverse array of specific activities, and is interpreted differently by distinct women. Health care providers must comprehend the social and cultural factors influencing the uptake of maternal and newborn health care services by women in informal and formal arrangements (WIFA) to facilitate interventions aimed at enhancing women's access to these services in Ghana [5,6].

This study defines socio-cultural factors as the aggregate of all elements that influence women's behavior concerning maternal and newborn health care services. Influences may stem from familial background, religious or cultural views, and the conventions or customs prevalent within one's society [7]. It is essential to comprehend cultural and social aspects affecting women of reproductive age to effectively use them as innovative instruments for enhancing the utilization of maternity and newborn health care services, especially among at-risk women in rural regions [8].

Social and cultural factors affect women's maternal and newborn health information by heightening exposure and susceptibility to diseases, promoting risk-taking behaviors, influencing the efficacy of health promotion initiatives, and determining the accessibility and quality of maternal and newborn health care services [9]. Women of reproductive age persistently encounter conventional obstacles to maternity and newborn health care services, particularly in rural regions of Ghana [8].

Factors such as low wages, inadequate livelihoods, insufficient nutrition, substandard health service accessibility, a shortage of health care professionals, poor road infrastructure, and other elements place women of reproductive age at significant risk during pregnancy, childbirth, and the postnatal period [10,11]. Conversely, several pregnant women in rural regions choose traditional health care systems, such as herbal medicine, believing their condition can be addressed through these remedies or due to the accessibility of such services [12].

The preference of women for traditional herbal remedies in maternal health services presents a barrier to governmental and partner initiatives aimed at reducing maternal mortality through the utilization of formal maternal health care services. The maternal health care services utilized by pregnant women are crucial in minimizing issues that may result in neonatal mortality or deformities [13]. According to the WHO (2024), at least one in four child fatalities transpires within the first month of life. These fatalities frequently occur before to the initiation of child health services, typically at six weeks during the initial immunization appointment. Insufficient adherence to cultural variables among mothers may contribute to the prevention of neonatal fatalities.

Research indicates that a comprehensive commitment to enhancing newborn health care yields significant socio-economic benefits for mothers, including reduced health care expenditures for infants, preferred family size, and increased time for employment. Nonetheless, several variables, including cultural influences, may explain the neglect of infant health care despite significant mortality rates and the prevalence of unreported neonatal fatalities [2]. The significant incidence of maternal sickness, near misses, maternal and neonatal fatalities, and other potentially catastrophic acute obstetric problems experienced by women in the region is predominantly associated with their inadequate access to proficient maternal and newborn health care services [14].

The stagnation in Ghana's advancement in enhancing maternal and newborn health, coupled with the deficiencies in the sustained utilization of maternity services from skilled providers, unequivocally indicates an urgent necessity for additional research to comprehend the social and cultural determinants, beyond financial constraints, that may be obstructing access for women, particularly in underprivileged communities [15]. This study elucidates the opinions of women of reproductive age regarding the cultural and societal factors influencing their utilization of maternity and newborn health care services in the designated study area.

In numerous rural communities in Ghana, where maternal health care services are few, traditional birth attendants (TBAs) function as providers of maternal and newborn health services, particularly during childbirth. These are untrained health workers lacking official education and attendance at any accredited health training school, nevertheless, they do deliveries. Their activities predominantly rely on traditional herbal medicine [16].

In the Northern region, particularly within the study setting, changes in maternal health indicators indicate a rise in women's utilization of maternal health care services from a national perspective. Nevertheless, an analysis of women's utilization of maternity and newborn health care facilities in rural areas of Ghana revealed an inequitable distribution regarding access and usage among rural women. The indicators have exhibited subpar performance in rural regions relative to urban areas [14].

No empirical research has been undertaken in the study context to evaluate the impact of cultural and social factors on women's utilization of maternity and newborn health care services. This study was meticulously chosen because of the dominant cultural and social characteristics that the individuals in the study environment persistently uphold. This study will

furnish information to enable relevant authorities to conduct effective initiatives that enhance access to maternal and neonatal health care services for women of reproductive age.

MATERIAL AND METHODS

Study Setting

The research was carried out in the East Mamprusi Municipality. The East Mamprusi Municipality is located in the northeastern section of the Northern Region. To the north, it borders the Talensi and Nabdam Districts, as well as the Bawku West and Garu-Tempane Districts, all located in the Upper East Region, while to the east lies the Bunkpurugu-Yunyoo District. It is bordered to the west by the West Mamprusi District and to the south by the Gusheigu and Karaga Districts. The area encompasses 1,706.8 square kilometers, accounting for approximately 2.2% of the region's total land mass [17].

The terrain is predominantly gently sloping, with the Gambaga escarpment delineating the northern boundaries of the Voltain Sandstone basin. Besides the mountainous regions adjacent to the escarpment, there is minimal runoff during rainfall. Various types of rock formations exist due to the diverse relief features, which range from flat-bottomed valleys to steep-sided mountains. The population of East Mamprusi District, as per the 2010 Population and Housing Census, is 121,009, constituting 4.9% of the region's total population. Males comprise 49%, while females account for 51%. The district's rural population is 81,850, accounting for 67.6%. The district's sex ratio is 96.6. The district's population is predominantly youthful, with individuals aged 0-14 years constituting 47.6%, resulting in a broad-based demographic pyramid that narrows significantly at the top, where senior individuals (60+ years) comprise only 6.3%. The overall age dependency ratio for the District is 109.2, with the male age dependency ratio at 117.7, surpassing the female ratio of 101.6 [17].

The District's Total Fertility Rate is 3.6, just exceeding the Regional average of 3.5. The General Fertility Rate is 102.6 births per 1,000 women aged 15-49 years, while the Crude Birth Rate (CBR) is 23.0 per 1,000 population [17]. The crude mortality rate for the district is 5.9 per 1,000 individuals. The mortality rate for males peaks at ages 65-69, with 27.1 deaths per 1,000 people, but for females, the maximum mortality rate of 20 deaths per 1,000 population occurs at age 70 and above. The majority of migrants (65.3%) residing in the district were born in the Northern area, while those originating from other regions account for 28.8%. Among migrants originating from other regions, 53.0% were born in Upper East, followed by 21.9% in Ashanti and 6.9% in Brong Ahafo [17].

The district has a population of 119,596 individuals residing in 13,895 households. The mean household size in the district is 8.6 individuals per family. Children represent the predominant segment of household composition, comprising 51.5%. Spouses constitute approximately 9.2%. Extended homes, including heads, spouses, children, and the head's relatives, comprise 62.8% of the total households in the district [17].

Study Design

The study employed a descriptive cross-sectional study design, which involves the collection of data from one point in time. This design is used to describe and interpret the relationship among the study variables in the study setting at a single point in time. The advantages of this study design are that it is relatively inexpensive, takes up little time to conduct, and it can estimate the prevalence of an outcome of interest because the sample is usually taken from the whole population. However, the study design cannot establish causality [18]. The study employed the quantitative approach to gather the data.

Research Population

The source of study participants for this study included women in their reproductive age who were available in the study setting at the time of the study. Therefore, women who were pregnant and had given birth in the last five years were sampled for the study because it was assumed by the study that they could recollect their experiences in assessing maternal health care services during pregnancy and childbirth.

Sample Size

The sample size was estimated to be 384 respondents. However, owing to some financial constraints, the sample size was reduced to 200 study participants. This sample size was calculated using Snedecor and Cochran (1989) formula.

Statistical Method

The completed questionnaire was coded and entered using the Statistical Package for Social Science (SPSS) software package (version 25.0). The data was summarized in Microsoft Excel 2016. The findings were presented using simple frequencies and percentages tables. Logistic regression analyses, which yielded odds ratio were used to establish the relationships between the dependent variables and the independent variables. All statistical tests were performed using two-sided tests at the 0.05 level of significance. P-values reported to three

Table 1. Knowledge of Women on Maternal and Newborn Health Care Services

Variable	Frequency (n)	Percentage (%)
Ever heard of maternal services		
Yes	200	100.0
Total	200	100.0
Sources of information		
Health worker	71	35.5
Friend	34	17.0
Media	58	29.0
School	25	12.5
Relatives	12	6.0
Total	200	100.0
ANC services during pregnancy		
Yes	178	89.0
Not applicable	22	11.0
Total	200	100.0
Trimester ANC initiated		
First	137	77.0
Second	34	19.1
Third	7	3.9
Total	200	100.0
Reason for initiation of ANC		
Did not know was pregnant	71	39.9
Did not want people to know	45	25.3
Started herbal medicine	62	34.8
Total	200	100.0
Number of times of ANC attended		
Less than four times	21	11.8
Four times	103	57.9
More than four times	54	30.3
Total	200	100.0

(Source: Author's Fieldwork, 2024)

decimal places with values less than 0.001 being reported as < 0.001.

RESULTS

The presentation of the results was done based on sub headings as they relate to the study objectives. The various sub-sections are, knowledge level of women in their reproductive age on maternal and newborn health care services, cultural factors that influence maternal and newborn health care services among women in their reproductive age, social factors that influence the use of maternal and newborn health care services among women in their reproductive and discussions.

Knowledge level of women in their reproductive age on maternal and newborn health care services

This section presents the knowledge of respondents concerning maternal and newborn health care services available to women in their reproductive age in the study setting. Based on the results, all the respondents revealed that they had ever heard of maternal and newborn health care services. Most of the respondents, 71(35.5%) identified health workers, and 58 (29%) respondents identified the media as their sources of knowledge concerning maternal and newborn health services. It was also revealed that, among those who had become pregnant before, all of them initiated antenatal care. The results revealed that, among that category, 137 (77%) of the respondents-initiated ANC in the first trimester. From the results, the frequency of ANC was examined among the respondents. In Table 1, majority of the respondents, 103 (57.9%) revealed that, they had attended ANC four times at the time of the study.

From the results illustrated in Table 2, it was revealed that, all the respondent identified education on how pregnant women could breastfeed after delivery as one of the benefits of attending ANC, whilst majority of the respondents, 148 (74%), identified nutrition education as a benefit of ANC. It was further revealed that, most of the respondents representing 55 (27.5%) did not consider how to take care of newborn as a benefit of attending ANC. From the results, it was further showed that, majority of the respondents, 184 (92%) considered newborn danger signs as one of the benefits of attending ANC, and 179 (89.5%) also considered danger signs during labour as one of the benefits of attending ANC. However, 39 (19.5%) of the respondents did not consider birth preparedness as one of the benefits of attending ANC.

Table 2. Benefits of Visiting ANC

Variable	Yes n (%)	No n (%)
Education on how to breastfeed	200 (100.0)	0 (0.0)
Nutrition education	148 (74.0)	52 (26.0)
Newborn care	145 (72.5)	55 (27.5)
How to take care of pregnancy	178 (89.0)	22 (11.0)
Newborn danger signs	184 (92.0)	16 (8.0)
Danger signs of labour	179 (89.5)	21 (10.5)
Birth preparedness	161 (80.5)	39 (19.5)
Danger signs in pregnancy	180 (90.0)	20 (10.0)
Sexual infection screening	188 (94.0)	12 (6.0)

Table 3. Maternal Health Services Received During Pregnancy

Variable	Agree	Neutral	Disagree
Lab test	200 (100.0%)	0 (0.0%)	0 (0.0%)
Medication	165 (82.5%)	35 (17.5%)	0 (0.0%)
Lab test and medication	108 (54.0%)	38 (19.0%)	54 (27.0%)
Obstetric scan	135 (67.5%)	15 (7.5%)	50 (25.0%)
Information on family planning	141 (70.5%)	22 (11.0%)	37 (18.5%)

Table 4. Overall Knowledge of Respondents

Variable	Poor	Good	Mean	Std. Dev.
Respondents	37 (18.5%)	163 (81.5%)	3.857	0.96

Table 5. Cultural Factors that Influence Maternal and Newborn Health Services

Variable	Agree	Neutral	Disagree
Availability of traditional healers	150 (75.0%)	35 (17.5%)	15 (7.5%)
Availability of traditional birth attendants (TBAs)	163 (81.5%)	11 (5.5%)	26 (13.0%)
Availability of spiritualist	13 (6.5%)	59 (29.5%)	128 (64.0%)
Affordability of herbal medicine	138 (69.0%)	34 (17.0%)	28 (14.0%)
Drug peddlers	42 (21.0%)	0 (0.0%)	158 (79.0%)
Availability of Mallams (Mallam water)	60 (30.0%)	66 (33.0%)	74 (37.0%)
Availability of Pastors (Holy water)	61 (30.5%)	58 (29.0%)	81 (40.5%)

Table 6. Cultural Factors affect the use of Maternal and Newborn Services

Variable	Yes n (%)	No n (%)
Husbands determine when ANC should be initiated	163 (81.5)	37 (18.5)
Newborns are bath with herbal medicine after birth	179 (89.5)	21 (10.5)
Newborn are hanged on their neck with goat horn	155 (77.5)	45 (22.5)
Pregnant women prefer TBAs to nurses	179 (89.5)	21 (10.5)
Newborns are not supposed to been by everyone	179 (89.5)	21 (10.5)
Mixed hospital medicine and herbal medicine for newborn	173 (86.5)	27 (13.5)
Knowledge of how culture affect maternal services	109 (54.5)	91 (45.5)

From the results illustrated in Table 3, majority of the respondents, 165 (82.5%) identified medication as one of the maternal health services receive during pregnancy whilst 50 (25%) did not consider obstetric scan as one of the maternal health services receive during pregnancy at health facility. It was further revealed that, majority of the respondents, 141 (70.5%) said that information about family planning was one of the maternal health services received during pregnancy.

From Table 4, the overall knowledge category across respondents was assessed. Respondents were grouped into two main categories based on the total score distribution (poor knowledge and good knowledge). The minimum scored was less than 50% and the maximum scored was 50% and above. Overall, 81.5% of respondents had good knowledge concerning maternal and newborn health services.

Cultural factors that influence maternal and newborn health care services among women in their reproductive age

The cultural factors that influence maternal and newborn health care services among women were assessed. Based on the results illustrated in Table 5, majority of the respondents, 150 (75%) identified availability of traditional healers as one of the cultural factors affecting maternal and newborn health services whilst 163 (81.5%) mentioned availability of traditional birth attendants at the study setting as one of the cultural factors affecting maternal and child health services. Based on the results, 138 (69%) also identified affordability of herbal medicine and 158 (79%) however, did not consider drug peddlers as a cultural factor affecting maternal and newborn health services.

From the results presented in Table 6, majority of the respondents mentioned husband determination of when

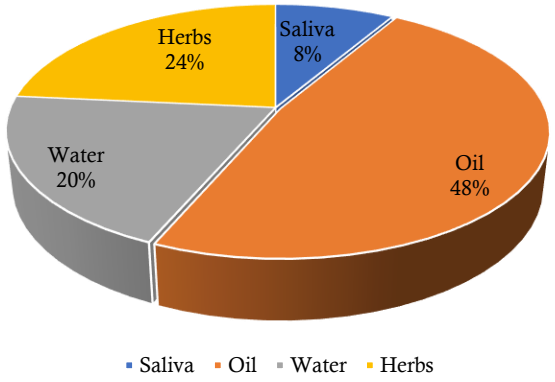


Fig.1. Substances applied to Newborn Eye

Table 7. Crude Odds Ratio (COR)

Categories	COR (95% CI)	p-value
Age		
18-25	1	
26+	3.28 (1.31, 8.81)	0.011
Education		
No formal education	1	
Formal education	4.31 (0.13, 0.69)	0.005
Occupation		
Salaried worker	1	
Non salaried worker	2.12 (1.29, 3.49)	0.003
Marital status		
Never married	1	
Married	3.50 (0.30, 0.85)	0.011
Parity		
1+	1	
None	5.01 (2.26, 11.12)	0.001
Distance to health facility		
Less than 2km	1	
More than 2 km	7.26 (2.11, 24.88)	0.002

ANC should be initiated as one of the ways culture affects maternal and newborn health services in the study setting at the time of the study. It was also revealed that pregnant women preferred to be attended to by TBAs as compared to nurses. More so, majority of the respondents, 155 (77.5%), considered wearing a newborn baby with a symbol of culture as a way culture affects newborn care. The results revealed that, majority of the respondents mentioned oil as one of the substances that is used to applied on the eyes of the newborn (Fig.1).

Table 7 shows that, respondents who had formal educational training were 4.31 times more likely to be knowledgeable on the cultural factors that affect maternal and newborn health care services as compared to those who had no formal educational training [COR = 4.31 (95% CI: 0.13, 0.69); p=0.005]. Also, respondents who were married were 3.50 times more likely to be knowledgeable concerning cultural factors affecting maternal and newborn care as compared to those who were not married [COR = 3.50 (95% CI: 0.30, 0.85); p = 0.011].

Table 8 shows that, respondents who attained the age of 26 years and above were 2.48 times more likely to have knowledge on cultural factors affecting maternal and child health services as compared to those who were aged between 18-35 years and the results was found to be statistically significant [AOR =2.48 (95% CI: 1.19, 5.14); p = 0.015]. In addition, respondents who were employed as salaried workers were 4.67 times more likely to be knowledgeable on cultural factors affecting maternal and newborn care as compared to those who were not employed and the results was found to be statistically significant [AOR = 4.67 (95% CI: 1.72, 12.71); p= 0.002]. From the results, respondents who were married were 4.91 times more likely to be knowledgeable on cultural factors affecting maternal and newborn care as compared to those who were never

Table 8. Adjusted Odds Ratio (AOR)

Categories	AOR (95% CI)	p-value
Age		
26+	1	
18-25	2.48 (1.19, 5.14)	0.015
Education		
No formal education	1	
Formal education	2.90 (0.35, 24.05)	0.322
Occupation		
Salaried worker	1	
Non salaried worker	4.67 (1.72, 12.71)	0.002
Marital status		
Never married	1	
Married	4.91 (1.36, 17.68)	0.015
Parity		
1+	1	
None	2.69 (1.15, 6.27)	0.022

Table 9. Social Factors that Influence the use of Maternal Health Services

Variable	Yes (n, %)	No (n, %)	Total (n, %)
Distance to access maternal health care services	178 (89.0%)	22 (11.0%)	200 (100.0%)
Cost involved in access to health services	180 (90.0%)	20 (10.0%)	200 (100.0%)
Attitudes of health staff towards MCH services	190 (95.0%)	10 (5.0%)	200 (100.0%)
Lack of knowledge of maternal health care services	180 (90.0%)	20 (10.0%)	200 (100.0%)
Season/time of pregnancy	178 (89.0%)	22 (11.0%)	200 (100.0%)
Time spent at the health center	164 (82.0%)	36 (18.0%)	200 (100.0%)
Partner does not support the idea	177 (88.5%)	23 (11.5%)	200 (100.0%)
Quality of service provided	162 (81.0%)	38 (19.0%)	200 (100.0%)
Knowledge of how social factors affect services	168 (84.0%)	32 (16.0%)	200 (100.0%)

Table 10. Reasons Women's Use Maternal and Child Health Services

Variable	Agree	Neutral	Disagree
Need for good health	200 (100.0%)	0 (0.0%)	0 (0.0%)
Free maternal health care	57 (28.5%)	75 (37.5%)	68 (34.0%)
Availability of health care service	60 (30.0%)	76 (38.0%)	64 (32.05)
Nearness of health center	75 (37.5%)	91 (45.5%)	34 (17.0%)
Available health professional	154 (77.0%)	24 (12.0%)	22 (11.0%)

married and the results was found to be statistically significant [AOR = 4.69 (95% CI: 1.36, 17.68); p = 0.015].

Social factors that influence the use of maternal and newborn health care services among women in their reproductive age

The results showed that social factors that influence the use of maternal and newborn health care services among women are available. From the results, majority of the respondents, 178 (89%) considered distance to access maternal and newborn care as a social factor affecting maternal and newborn care services, whilst 180 (90%) considered cost involved in accessing maternal and newborn care health services as a social factor. The results also showed that 164 (82%) identified time spent at the health center as a social factor affecting maternal and newborn health care services. And 162 (81%) of the respondents identified quality of service provided at health services as a factor affecting maternal and newborn health care services (Table 9).

From the results in Table 10, most of the respondents, 64 (34%) did not consider free maternal health care as a reason for the use of maternal and child health services whilst 60 (30%) respondents considered availability of health care services as a reason why women used maternal and newborn health services. The results also showed that 75 (37.5%) of the respondents agree with the statement that the nearness of health centre to women influences their use of maternal and newborn care services.

Table 11 shows that, respondents who were staying more than 2km away from a health centre were 2.26 times more likely to be knowledgeable on the social factors that affect maternal and newborn health care services as compared to those who were staying less than 2km away from a health centre [COR = 2.26 (95% CI 2.11, 24.88); p = 0.152]. Table 12 shows that, respondents who attained no formal education were 3.90 times more likely to have knowledge on social factors affecting maternal and child health services as compared to those who had formal educational training

Table 11. Crude Odds Ratio (COR) (95% CI) p-value

Categories	COR (95% CI)	p-value
Age		
18-25	1	
26+	1.28 (0.11, 3.81)	0.151
Education		
No formal education	1	
Formal education	1.31 (0.03, 2.69)	0.050
Occupation		
Salaried worker	1	
Non salaried worker	2.12 (1.29, 3.49)	0.003
Marital status		
Married	1	
Never married	3.50 (0.30, 0.85)	0.011
Parity		
1+	1	
None	5.01 (2.26, 11.12)	0.001
Distance to health facility		
Less than 2km	1	
More than 2 km	2.26 (2.11, 24.88)	0.152

Table 12. Adjusted Odds Ratio (AOR)

Categories	AOR (95% CI)	p-value
Education		
No formal education	1	
Formal education	3.90 (0.35, 7.05)	0.502
Occupation		
Salaried worker	1	
Non salaried worker	3.57 (1.72, 5.71)	0.050
Marital status		
Never married	1	
Married	2.91 (0.36, 5.68)	0.055
Parity		
1+	1	
None	4.69 (1.15, 6.27)	0.041

and the results was found to be statistically significant [AOR =3.90 (95% CI: 0.35, 7.05); p = 0.502]. In addition, respondents who were employed as salaried workers were 3.57 times more likely to be knowledgeable on social factors affecting maternal and newborn care as compared to those who were not employed, and the results was found to be statistically significant [AOR = 3.57 (95% CI:11.72, 5.71); p= 0.050]. From the results, respondents who had one and above children were 4.69 times more likely to be knowledgeable on social factors affecting maternal and newborn care as compared to those who had no child and the results was found to be statistically significant [AOR = 4.69 (95% CI: 1.15, 6.27); p = 0.050].

DISCUSSION

Knowledge of women in their reproductive age on maternal and newborn health care services

Knowledge is an essential element in all facets of human existence. Women's awareness of maternal and health care services may affect their utilization of these services. All participants reported prior awareness of maternity and child health services at the time of the study in the designated setting. This study's finding aligns with the research conducted by Vikram and Vanneman (2020) [3], which indicated that women in India acknowledged their awareness of maternity and child health services. This study parallels the research conducted by Vikram and Vanneman (2020) in that the majority of participants were women of reproductive age who likely accessed these services at health care facilities prior to the study and will persist in utilizing these services thereafter. The utilization of mother and newborn health care services significantly enhances maternal care knowledge and perceived quality of hospital treatment during pregnancy, labor, and the postpartum period.

The findings indicated that the predominant sources of knowledge regarding mother and child health services among participants were health care professionals and the media. This study's finding aligns with the research conducted by Roy, Sahoo, and Sarangi (2017) [8], which indicated that women surveyed in Bhubaneswar, India, recognized health care staff and the media as the predominant sources of information regarding maternal health services. This study's finding underscores the essential role of health workers, particularly those in the public health sections of the hospitals within the study environment, in providing women of reproductive age with vital information regarding the necessity of

utilizing modern health care facilities. The media plays a crucial role in the distribution of information today. Virtually every household possesses a wireless device or television that frequently addresses topics related to mother and child health care.

The study indicated that the majority of participants had engaged in antenatal care at the time of the research. This study's finding contradicts Shamsu-Deen's (2013) research, which indicated that women surveyed in Yendi, Ghana, did not utilize ANC services but instead sought assistance from traditional birth attendants. Cultural and traditional health practices significantly influence maternity and neonatal health care services in most regions of Ghana. This elucidates why rural communities often favor traditional beliefs regarding pregnancy and childbirth, as they perceive Traditional Birth Attendants (TBAs) to possess a superior understanding of local women compared to the typically younger and less courteous health workers in hospitals. The study indicated that the majority of respondents reported that the advantages of utilizing ANC services during pregnancy include guidance on breastfeeding post-delivery.

This study's finding aligns with the research conducted by Ganle et al. (2015) [10], in which women surveyed in Ghana identified breastfeeding as a reason for attending antenatal care (ANC). Empirical assessments worldwide indicate that maternal milk postpartum significantly influences the likelihood of exclusive breastfeeding practices. Breast milk is the initial nourishment provided to the infant post-delivery. The study indicated that the majority of participants did not perceive neonatal care as a benefit of antenatal care (ANC). This finding from the study contradicts the research conducted by Dimbuene et al. (2018) [19], which indicated that in Africa, ANC health personnel instructed women on the care of their newborns post-delivery.

The results indicated that one advantage of women participating in ANC was to inform them about birth readiness. This study's finding aligns with the research conducted by Dynes et al. (2013) [20], which indicated that women received education on birth preparedness during antenatal care (ANC). Given the unpredictability of obstetric emergencies, women and their families remain prepared for diverse scenarios that may occur during birth. A comprehensive birth preparedness strategy will consistently mitigate confusion and minimize the duration of delivery, as well as alleviate uncertainty during the process.

Women consistently pursue appropriate health care after identifying warning symptoms during pregnancy. Nevertheless, most of them are uninformed of the warning indications associated with pregnancy. The study additionally indicated that the majority of participants reported that antenatal care (ANC) assists them in recognizing danger indicators during pregnancy. This finding aligns with the research conducted by Dewi, Yustina, Sudaryati, and Zuska (2020) [21], which indicated that women in Manunggang Jae Village, Padangsidimpuan City, Indonesia, sought antenatal care due to their awareness of pregnancy-related risks.

The study indicated that the majority of participants identified family planning as one of the most frequently referenced maternal health care services obtained during pregnancy. This study's finding corroborates the research conducted by Deshmukh, John, and Arora (2020) [1], which indicated that mothers got family planning services during antenatal care (ANC). The study indicated that pregnant women obtain obstetric scans during antenatal care appointments. This study's finding aligns with the research conducted by Dapaah and Nachinaab (2019) [14], which indicates that women obtain obstetric scans during antenatal care visits. The respondents' general understanding in the subject area was deemed satisfactory. This finding aligns with the research conducted by Bandyopadhyay and MacPherson (2019) [22], which indicated that women surveyed in India possessed adequate knowledge regarding the various maternal and child health services accessible to them at different hospitals.

Cultural factors that influence the use of maternal and newborn health care services among women in their reproductive age

The integration of traditional medicine with contemporary medicine for maternity-related health issues is prevalent, particularly in the study context. The results indicated that most participants saw the presence of Traditional Birth Attendants (TBAs) in the communities as a cultural component influencing maternal and newborn health care services. This study's finding aligns with the research conducted by Atuahene et al. (2017), which indicated that in Ghana, participants from inner-city neighborhoods identified the presence of Traditional Birth Attendants (TBAs) as a cultural factor influencing the utilization of maternal and newborn health care services. It is essential to note that Traditional Birth Attendants (TBAs) play crucial roles in maternal health care within the rural communities of Ghana. In many jurisdictions, traditional birth attendants (TBAs) represent the majority of birthing care providers because to the scarcity of skilled birth attendants, including physicians, midwives, and nurses.

The results indicated that the majority of participants saw the presence of traditional healers as a cultural factor influencing maternity and neonatal care services. This study's finding aligns with the research conducted by Bandyopadhyay and MacPherson (2019) [22], which indicated that the presence of traditional healers in India impacts maternal and neonatal health

care services. The majority of participants identified the cost of herbal medicine as a cultural element influencing maternity and newborn health care services in the study environment. This study's finding contradicts Adhikari's (2016) [23] research, which indicated that women's autonomy was a cultural component affecting maternal and neonatal health care services among women in Nepal.

The results indicated that most participants identified the washing of newborns with herbal medications post-birth as a cultural component influencing maternal and newborn health care services. This study's finding aligns with the research conducted by Adatara et al. (2019) [24], which indicates that herbal bathing post-birth is regarded as a cultural practice in Northern Ghana. This impacted the utilization of maternity and neonatal care services among women. The results indicated that most participants believed not everyone should view the infant shortly after birth due to concerns about the malevolence of certain individuals in the study environment. This study's finding aligns with the research conducted by Abor, Abekah-Nkrumah, and Sakyi (2011) [11], which indicated that most individuals in Ghana believe that not everyone should see the infant after delivery. This elucidates why the majority of women are expected to enter a phase of confinement at home following childbirth.

Social factors that influence the use of maternal and newborn health care services among women in their reproductive age

Significant disparities persist in women's access to maternal health care. The impact of distance on health service utilization is mostly ascribed to travel time and expenses, exacerbated by challenging geography, inadequate road infrastructure, and limited transportation options at various times. The results indicated that most participants identified proximity to health care facilities as a determinant affecting the utilization of maternal and neonatal health services. This study's finding aligns with the research conducted by Dantas, Singh, and Lample (2020) [4], which indicated that proximity to health care facilities influenced maternal and neonatal health services in Uganda. The study indicated that virtually all participants identified the demeanor of health care personnel as a factor influencing the utilization of maternity and neonatal health services in the study context.

This study's finding aligns with the research conducted by Dapaah and Nachinaab (2019) [14], which indicated that the attitudes of health care personnel constitute a social factor influencing women's utilization of maternal health services in the study context. In the health care system, prolonged waiting for services is universally undesirable. Health care differs significantly in that individuals only visit hospitals or clinics when absolutely necessary. Women have occasionally exhibited anger and departed after enduring prolonged waits for services at health care institutions. Some individuals have lost their composure and attacked health care staff within the medical setting. The results indicated that the majority of participants identified delays at hospitals as a factor influencing the utilization of maternal and child health care. This study's finding contradicts the research conducted by Karkee, Lee, and Binns (2013) [25], which indicated that the cost of delivering maternity and child health services to women was a social factor influencing the utilization of these treatments.

In the health care context, the quality of care perceived by the patient refers to the provision of inexpensive, safe, and effective assistance during times of need. The results indicate that the majority of participants saw the quality of health care as a determinant influencing the utilization of maternal and child health services. This study's finding aligns with the research conducted by Herschderfer et al. (2012) [7], which indicated that women in Sierra Leone saw the availability of excellent health services as a social determinant influencing the utilization of maternity and child health services. The study indicated that women did not perceive free maternal health care as a social determinant influencing the utilization of maternity and child health services in the study context. This results contradict the study conducted by Geleto et al. (2018), which found that women utilized maternal and child health services due to the provision of free maternal health services.

CONCLUSION

Findings from the study revealed that social and cultural beliefs and practices were still traditionally rooted in the minds of most women in the study setting which is negatively influencing women use of maternal and newborn health services. From the results, there were still issues of cultural and social factors such as availability of TBAs, and the personal likes of women to voluntarily go for maternal and newborn health care services. These issue if not address could still have negative impact of maternal and child health in the study area.

The health care sector's capacity to provide effective and high-quality treatments equitably is significantly contingent upon appropriately addressing the social, cultural, and economic contexts that contribute to ill health and disability among pregnant women in rural Ghanaian communities. The coverage of fundamental maternal health interventions and the use of private physicians are diminished among impoverished rural

women. A deeper comprehension of the issues related to the availability, affordability, and quality of maternal health services among the respondents in the study setting is essential for eradicating disparities in maternity and newborn health coverage

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CONFLICT OF INTEREST

The authors declare there is no conflict of interest.

REFERENCES

1. Deshmukh, V., John, S., & Arora, N. K. (2020). Utilization of Postnatal Health care Services Delivered through Home Visitation and Health Facilities for Mothers and Newborns: An Integrative Review from Developing Countries. *The Indian Journal of Pediatrics*, 1-10.
2. WHO (2012b). WHO recommendations: Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting. Geneva: WHO. Available at: http://www.popline.org/node/ 562104.
3. Vikram, K., & Vanneman, R. (2020). Maternal education and the multidimensionality of child health outcomes in India. *Journal of biosocial science*, *52*(1), 57-77.
4. Dantas, J. A., Singh, D., & Lample, M. (2020). Factors affecting utilization of health facilities for labour and childbirth: a case study from rural Uganda. *BMC Pregnancy and Childbirth*, *20*(1), 39.
5. Darko, L. K. (2015). To Practice or Not to Practice: Perspectives of Traditional Birth Attendants and Local Communities in The Ga-West Municipality on The New Reproductive and Child Health RCH) Policy in Ghana [Ph.D. thesis], Department of Sociology, University of Ghana, Legon, Ghana.
6. Adhikari, R. (2016). Effect of women's autonomy on maternal health service utilization in Nepal: a cross sectional study. *BMC Women's Health*, vol. 16, No. 26, pp. 1-7.
7. Herschderfer, K, Sam, E, Walker, P, Jalloh-Vos, H, Detmar, S, & Koning, K. D. (2012). Barriers and Promising Interventions for Improving Maternal and Newborn Health in Sierra Leone. Royal Tropical Institute (KIT).
8. Roy, S., Sahoo, A., & Sarangi, L. (2017). Factors Affecting Utilization of Maternal Health Care Services in Urban area of Bhubnaneswar, India. J Pharm Pract Community Med. 3(3):138-144.
9. Karkee, R., Lee, H. A., & Binns, C. W. (2013). Why women do not utilize maternity services in Nepal: a literature review. *WHO Southeast Asia Journal of Public Health*, vol. 2, No. 3, pp. 135-141.
10. Ganle, J. K., Otupiri, E., Parker, M., & Fitzpatrick, R. (2015). Socio-cultural barriers to accessibility and utilization of maternal and newborn health care services in Ghana after user-fee abolition.
11. Abor, P. A., Abekah-Nkrumah, G., & Sakyi, K. (2011). The socio-economic determinants of maternal health care utilization in Ghana. *International Journal of Social Economics*, *38*(7), 628-648.
12. Ganle, J. K., Kombet, M. L., & Baatiema, L. (2019). Factors influencing the use of supervised delivery services in Garu-Tempane District, Ghana. *BMC pregnancy and childbirth*, *19*(1), 141.
13. Apanga, P. A., & Awoonor-Williams, J. K. (2017). Improving Skilled Birth Attendance in Ghana: An Evidence-Based Policy Brief. *Journal of health care for the poor and underserved*, *28*(3), 1056-1065.
14. Dapaah, J. M., & Nachinaab, J. O. (2019). Sociocultural Determinants of the Utilization of Maternal Health Care Services in the Talensi District in the Upper East Region of Ghana. *Advances in Public Health*.
15. Ganle, J. K., Obeng, B., Yeboah, J. Y., Tagoe-Darko, E., & Mensah, C. M. (2016). Disparities in abortion experience and access to safe abortion services in Ghana: evidence from a retrospective survey. *African journal of reproductive health*, *20*(2), 43-52.
16. Adatara, P., Strumpher, J., Ricks, E., & Mwini-Nyaledzigbor, P. P. (2019). Cultural beliefs and practices of women influencing home births in rural Northern Ghana. *International Journal of Women's Health*, *11*, 353.
17. Ghana Statistical Service (GSS, 2010). District Analytical Report of East Mamprusi District. Ghana Statistical Service; Housing and population Census; p34
18. Bernard, H. R. (2000). *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
19. Dimbuene, Z. T., Amo-Adjei, J., Amugsi, D., Mumah, J., Izugbara, C. O., & Beguy, D. (2018). Women's education and utilization of maternal health services in Africa: a multi-country and socioeconomic status analysis. *Journal of biosocial science*, *50*(6), 725-748.
20. Dynes, M., Buffington, S. T., Carpenter, M., Handley, A., Kelley, M., Tadesse, L. & Sibley, L. (2013). Strengthening maternal and newborn health in rural Ethiopia: Early results from frontline health worker community maternal and newborn

health training. Midwifery 29(3): 251–9. doi:10.1016/j.midw.

21. Dewi, R., Yustina, I., Sudaryati, E., & Zuska, F. (2020). Postpartum Maternal Care Tradition in Manunggang Jae Village Padangsidimpuan City Indonesia. *Britain International of Exact Sciences (BIoEx) Journal*, *2*(1), 231-239.
22. Bandyopadyay, M., & MacPherson, S. (2019). *Women and health: Tradition and culture in rural India*. Routledge.
23. Adhikari, R. (2016). Effect of women's autonomy on maternal health service utilization in Nepal: a cross sectional study. *BMC Women's Health*, vol. 16, No. 26, pp. 1-7.
24. Adatara, P., Strumpher, J., Ricks, E., & Mwini-Nyaledzigbor, P. P. (2019). Cultural beliefs and practices of women influencing home births in rural Northern Ghana. *International Journal of Women's Health*, *11*, 353.
25. Karkee, R., Lee, H. A., & Binns, C. W. (2013). Why women do not utilize maternity services in Nepal: a literature review. *WHO Southeast Asia Journal of Public Health*, vol. 2, No. 3, pp. 135-141.
26. Yasin, C., Geleto, A., & Berhane, Y. (2019). Referral linkage among public health facilities in Ethiopia: A qualitative explanatory study of facilitators and barriers for emergency obstetric referral in Addis Ababa city administration. *Midwifery*, *79*, 102528.