

Male Involvement in the Maternal Health Care: Expectations of Pregnant Women in Bolgatanga Municipality in the Upper East Region of Ghana

Peter Nbaltoe Unawari^{1*} , Mabel Suma-Amineng Faanye¹, Christiana Amalba¹, Emmanuel Awine Ayamga², Barikisu Ategtore Alhassan¹, Lydia Akosua Tachie¹, Francisca Ageyesika¹, Clementia Lenye Ngambire¹, Mathias Nampar Gnansin³

¹Bolgatanga Midwifery Training College, Bolgatanga, Ghana

²Municipal Health Directorate, Bolgatanga, Ghana

³Nursing Training College, Bolgatanga, Ghana

Email: *unawarinbaltoe@yahoo.com, fmabel89@gmail.com, christieamalba@yahoo.com, eaayamga@gmail.com, alhassanbarikisu78@gmail.com, delwinak@gmail.com, gezellensoh@gmail.com, clementialenye@gmail.com, gnamparmathias@yahoo.com

How to cite this paper: Unawari, P.N., Faanye, M.S.-A., Amalba, C., Ayamga, E.A., Alhassan, B.A., Tachie, L.A., Ageyesika, F., Ngambire, C.L. and Gnansin, M.N. (2023) Male Involvement in the Maternal Health Care: Expectations of Pregnant Women in Bolgatanga Municipality in the Upper East Region of Ghana. *Open Journal of Nursing*, 13, 1-21.

<https://doi.org/10.4236/ojn.2023.131001>

Received: November 14, 2022

Accepted: January 13, 2023

Published: January 16, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Background: Male involvement during pregnancy and childbirth is very important as it has been shown to increase the number of times a pregnant woman undertakes antenatal care visits before delivery. The purpose of this study was to determine whether there is a relationship between the background characteristics of participants and their male partners' involvement in maternal health care in the Bolgatanga Municipality of Upper East Region. **Methods:** The study design employed was a facility-based cross-sectional study design in 9 health facilities in the Bolgatanga municipality. The study populations for this study consisted of pregnant women using antenatal services in the health facilities before the commencement of this current study and are residents of the Bolgatanga municipality. A multistage sampling strategy was used in the sampling of participants for this study with an estimated sample size of 422. **Results:** Findings show that the majority of 403 (95.5%) of the participants expect their male partner accompanies them during the antenatal care clinic. The chi-square test revealed that marital status had a significant influence on male partners' support in house chore and support in antenatal care service (P-value of 0.001 and 0.002, <0.05). The level of education and region of the participants were found to have a relationship with the expectation of pregnant women that male partners help them in doing house chores antenatal care (P-value 0.027 and 0.000, <0.05). **Conclusion:** This study's findings showed that pregnant women always want their

male partners to accompany them to antenatal care and during labour and delivery. The pregnant women expected their male partners to be educated on the effects of pregnancy, how to take care of a pregnant woman, how to tolerate their partners, Sex during pregnancy, and how to prepare for emergencies (blood donation, transportation and finance).

Keywords

Pregnant Women, Male Partner, Involvement, Antenatal Care, Labour and Delivery

1. Background

The World Health Organization's recommendations on health promotion interventions for maternal and newborn health stated that interventions to promote the involvement of men during pregnancy, childbirth and after birth are recommended to facilitate and support improved self-care of women, improved home care practices for women and newborns, improved use of skilled care during pregnancy, childbirth and the postnatal period for women and newborns, and increase the timely use of facility care for obstetric and newborn complications [1].

The pregnant women preferred being accompanied by their husbands to antenatal care services which reduce the risks of pregnancy and childbirth complications [2]. Wives who received husbands' support during pregnancy and childbirth were observed to have shorter labor and had minimal chances of going through cesarean deliveries. On the other hand, lack of male involvement during pregnancy and childbirth is one of the major factors responsible for maternal morbidity and mortality in many developing countries including Ghana [3].

Findings show that most men in developing countries know little about pregnancy and childbirth, making them not get involved during pregnancy and childbirth unless the midwife or doctor urgently requests the husbands' involvement [4].

According to Ghana's maternal health survey 2017, pregnancy related mortality ratio is 343 deaths per 100,000 live births and maternal mortality is 310. It was reported that the cause of ten percent of deaths could not be determined [5].

Male involvement during pregnancy and childbirth is very important as it has been shown to increase the number of times a pregnant woman undertakes antenatal care visits before delivery [6]. However, most men in developing countries do not participate in the matter of pregnancy and childbirth [7]. The educational level of the expectant father concerning pregnancy and childbirth influences their involvement during pregnancy and childbirth [8].

Findings indicate that the lack of health infrastructures to favor the presence of male partners during labour and delivery is a majority barrier to male involvement. Also, health facilities policies impede the participation of male part-

ners in labour and delivery process [2] [4]. Men were responsible for birth preparedness items, finance and transport before, during and after delivery [2].

The finding showed that men with knowledge of the danger signs of pregnancy and delivery are more likely to prepare for childbirth. Being married, escorting their wives to ANC service and urban residence are likely to prepare for childbirth and complication readiness [9]. Findings in the qualitative study indicated that there were mixed expectations. The females preferred their male partners accompanying them for the first ANC service to HIV testing. Few females preferred their male partners to accompany them during routine ANC service. Some females and community leaders did not see the importance and need for male partners attending together with their wife's routine ANC service. The finding also indicated that men did not prefer to be in labour and delivery room with their wives but rather preferred mother-in-law, sisters and other females [2].

A study conducted in Nigeria found that educated and employed women had a good perception of male involvement during pregnancy and labour compared to their colleagues who were not educated and employed [4].

2. Methods

2.1. Study Design

The study employed a facility-based cross-sectional study design of a quantitative approach. Using data from pregnant women. With this study design, the researcher the data was collected from many participants at a single point in time based on the inclusive criteria for this current study. The study was conducted in Bolgatanga municipality from June to August 2022.

2.2. Study Area

This study was carried out in Bolgatanga municipality in selected health facilities. The municipality is made up of multiple tribes with different cultural and religious believes.

Bolgatanga Municipality is located in the center of the Upper East Region and is also the regional capital. For the purpose of health delivery, the Municipality has been divided into nine (9) sub-municipals namely: Bolga Central, Bolga North, Bolga South, Kalbeo, Sherigu, Sumbrungu West, Sumbrungu East and Plaza. The capital of the Municipality is Bolgatanga which is cosmopolitan. The major tribe is Frafra with a significant tribe from within the Upper East Region as well as other neighboring regions in the country. The municipality has estimated women in their reproductive age to be 26,556. According to the 2021 population and housing census, Bolgatanga municipality has a total population of 139,864 out of this 66,607 (47.6) are males and 73,257 (52.4) are female [10].

Bolgatanga Municipality has a total of 41 health facilities delivering various level of health care to residents and neighboring districts. The health system is a mix of public health facilities, private as well as CHAG. Also, there are well-established

herbal practitioners in the municipality though the majority of the herbal practitioners are not well-established and perhaps not licensed.

The residents in the municipality have varying educational, socioeconomic and other demographic backgrounds pertinent to understanding the expectation of male partners' involvement in the health care of their female partners during pregnancy, delivery and postnatal.

2.3. Study Population

A study population is the group of individual units (persons, families, health facilities) to be investigated [11]. The study population for this present research consisted of pregnant women visiting health facilities in the Bolgatanga Municipality for antenatal care services during the data collection period and residents in the municipality.

2.4. Sample Selection Inclusion Criteria

The study included pregnant women visiting health facilities within the municipality for ANC services, residing in the municipality for at least one year prior to the survey period. However, women who were not willing to participate and were severely ill during the data collection period were excluded.

2.5. Sample and Sampling Method

The health facilities in the municipality were stratified into nine strata, the health administrative zones (sub-municipalities -Bolga Central, Bolga North, Bolga South, Kalbeo, Sherigu, Sumbrungu West, Sumbrungu East and Plaza). A simple random sampling method was used to select one health facility from each stratum. This was done by writing the name of health facilities on pieces of paper, putting them in a box and shaking them vigorously for them to be well mixed and picking one health facility. Quota sampling method was used to give a total number of participants in each selected health facility can have since the number of ANC attendance differ from facility to facility.

A convenience sampling method was used to select each participant who was available for the study after research assistant explained the purpose of the study to the participants. To avoid using the same participants, participants who agreed to take part in the study were given a unique number. A participant who declined to participate was replaced by selecting the next person.

2.6. Sample Size

To calculate the sample size n represents the required sample size, Z is the confidence level at 95% (standard value of 1.96) and p is the estimated proportion of 0.5% women in their fertile age; d is the margin of error at 5% (standard value of 0.05).

$$\text{The formula is } N = \frac{z^2 pq}{d^2} \quad N = \frac{(1.96)^2 0.5 \times 0.5}{0.05^2} \quad N = \frac{3.842 \times 0.25}{0.0025}$$

$$N = \frac{0.9605}{0.0025} \quad N = 384.$$

Those participants who may not respond to some of the questions were considered by adding 10% of 384 which is 38 to the figure. That is $384 + 38 = 422$.

Therefore, the estimated sample size is 422.

2.7. Data Collection Technique and Tool

The researcher used a structured questionnaire, in English, to collect information from participants through a face-to-face interview and filled based on responses from participants. For participants who did not understand English or preferred to communicate in a different language, the questionnaire was administered in the main local language (Guruni) or a language of preference.

The questionnaire was used to collect information on; Section A: socio-demographic characteristics such as age, educational level, marital status, religion, number of children, and employment status of the study participants and their male partners. Section B: pregnant women's expectations of the male partners during pregnancy and section C: pregnant women's expectations of the male partners during labor and delivery.

2.8. Data Analysis

The data collected from the field was edited for any inconsistencies, completeness and appropriately coded. Thereafter, the data collected was entered into SPSS version 20. Descriptive statistic was done and information was presented in frequency distribution tables and cross-tabulation tables. A chi-square test was used to assess the association between the dependent variable and independent variables. Statistical significance was set at $p < 0.05$ with a confidence level of 95%. Paired t-test was used for continuous variables.

2.9. Ethical Consideration

The researcher obtained ethical approval from the Institutional Review Board (IRB) of the Navrongo Health Research Center with ethics approval id: NTHRCIRB465. The research assistant obtained informed consent from all participants after giving a description of the purpose of the study in the language that the participants understand. The research assistant used written informed consent form for participants to sign or thumb prints. The participants received a signed copy of the consent form. This was documentation evidence that participant agreed to take part in the study. No form of coercion was used to entice the study participants to participate in this current research. The research assistant adhered to privacy and confidentiality throughout the study processes by not using personal identifiers like names. All questionnaires were assigned, and the answers given analyzed and reported as group data. The information generated was entered into a personal computer and stored on a password-protected device. Access to the data was only limited to the Principal investigator.

2.10. Plans for Ensuring Quality of the Data

There were guidelines on sampling procedures and what to do if participants are not available or refuse to cooperate, clear explanation of the purpose and procedures of the study which should be used to introduce each interviewer and instruction sheets on how to ask certain questions.

Two Research assistants were carefully selected with criteria of being knowledgeable concerning the topic and local conditions, local language, not the subjects of study themselves and not biased concerning the topic. Therefore, research assistants were nurses. They have trained for 2 days on the questionnaire and data collection techniques. The principal investigator (PI) cross checked at the end of each day during the data collection period whether the questionnaires are completely filled in completely and whether the recorded information made sense.

2.11. Pre-Test

The questionnaire was pretested in two of the unsampled health facilities in the municipality on 42 pregnant women. This allowed for evaluation of questions that were asked and training of the research assistants.

3. Results

3.1. Background Characteristics of the Participants

The results as shown in **Table 1** revealed that the majority (77.5%) of the participants were Christians, 22% Muslim and 0.5% were traditionalists. With regards to the number of children, the majority 157 (37.2%) of the participants had no child, 24.9% had a child, 23.0% had two children, 11.4% of them had three children, 0.7% had five children and 2.8% indicated that they had four children. With respect to education, most 144 (34.1%) of the participants had attained tertiary level of education, 29.4% had secondary education, 20.6% had JHS level of education, 10.9% said they had a primary level of education and 5.0% of participants never had basic education. On the part of employment as shown in **Table 1**, half 212 (50.2%) of the participants indicated that they were self-employed, 21.8% were employed in government sector, 17.1% were not employed, 6.2% were employed in the private sector and 4.7% indicate that they were housewives. Also, the results showed that the majority 389 (92.2%) were married, 4.5% were single, 3.1% were cohabiting and 0.2% had separated from marriage.

Table 2 and **Table 3** show the age descriptive statistics and test for age differences between participants and their male partners respectively. The mean age of the participants was found to be 27.82 with most of them being within the age group of 25 - 29. On the other hand, the mean age of the husbands/partners was found to be 33.27 with most of them being within the age group of 29 - 38. This gives a mean age difference of 5.450 which was found to be significant with a p-value of 0.000, <0.05.

The results on the husbands'/partners' background characteristics showed that a little above half 230 (54.5%) were within the ages of 29 - 38, 24.0% were

Table 1. Background characteristics of the participants. (N = 422)

VARIABLE	FREQUENCY	PERCENTAGE %
Age of the participant		
15 - 19	27	6.4
20 - 24	101	24.0
25 - 29	123	29.1
30 - 34	121	28.7
35 - 39	44	10.4
40 - 44	6	1.4
Religion		
Christianity	327	77.5
Islamic	93	22.0
Traditionalist	2	0.5
Number of children		
0	157	37.2
1	105	24.9
2	97	23.0
3	48	11.4
4	12	2.8
5	3	0.7
Level of education		
Never went to school	21	5.0
Primary	46	10.9
Junior high school	87	20.6
Secondary school	124	29.4
Tertiary school	144	34.1
Employment status		
Unemployed	72	17.1
Self-employed	212	50.2
Government employed	92	21.8
Private employed	26	6.2
Housewife	20	4.7
Marital status of the participants		
Married	389	92.2
Cohabiting	13	3.1
Single	19	4.5
Separated	1	0.2

Source: Author's data.

Table 2. Descriptive Statistics of participants' Ages.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Participant's Age	27.82	422	5.506	0.268
	Husband's Age	33.27	422	6.633	0.323

Table 3. Test for Age differences between participants and husbands.

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Age of the participant How old is your Husband/partner?	5.450	4.192	0.204	-5.851	-5.049	-26.708	421	0.000

within the ages of 19 - 28, 20.6% were within 39 - 48 age group and 0.9% were within the age group of 49 - 68. With regards to the educational level of partners of the participants, the results showed that 41.9% of them had tertiary education, 29.6% had secondary education, 19.0% had JHS, and 5.2% had never had formal education (See **Table 4**).

Also, the results showed that half 211 (50.0%) of the participants were self-employed, 35.1% were in the government sector, 10.2% were in the private sector and 4.7% were not employed.

3.2. Pregnant Women's Expectations from the Male Partners during Pregnancy

The results in **Table 5** revealed that the majority of 403 (95.5%) of the participants expected their male partners to accompany them during antenatal care clinic whilst 4.5% felt it is not necessary. Of those who expected their partners to accompany them, 60.7% indicated that their partners could do so as many times as possible, 30.3% indicated that male partners should accompany them all the time and 4.5% of the participants expect that their male partners accompany them once to antenatal care clinic.

Furthermore, as indicated in **Table 5**, the results showed that 212 (50.2%) of the participants' male partners never accompanied them to antenatal care clinic at the time of the data collection whilst nearly half (49.8%) of the participants indicated that their male partners did follow them. Of those who indicated that their male partners never accompanied them gave reasons as follows, 33.4% mentioned that the male partner was busy at work always, 11.6% said their partners were not available, 3.3% indicated that their partners simply refused to follow them whilst 1.9% of the participants never asked their partners to accompany them.

With regards to the utilization of Ultrasound scan, the results showed that 414 (98.1%) of the participants did ultrasound scan at the time of data collection

whilst 1.9% did not. Of those who did an ultrasound scan, 62.8% of them said their male partners did not accompany whilst 35.3% said their male partners accompanied them. On the aspect of whether the sex of the fetus influenced male partners to support their wives during pregnancy, more than half (57.6%) of them thought that knowing sex of the fetus will not have an influence on their male partner whilst 42.4% indicated that knowing the sex of the fetus could influence their male partners to support them.

The results further indicated that the majority of 398 (94.3%) of the participants expected their male partners to support them in doing house chores during pregnancy. However, 5.7% of them felt that they did not need their male partners support. Of those who said they did not need their male partners to support in house chores gave various reasons; 5.2% of them said it was not males' work and 0.5% said they had siblings to support.

Also, the results showed that the pregnant women expected their male partners to be educated on how to support them during pregnancy as the majority 416 (98.6%) of the participants indicated it was necessary to educate their male partners whose wives are pregnant on how to support and care for them whilst 1.4% of the participants felt it was not necessary.

Table 4. Background characteristics of husband/partners.

VARIABLE	FREQUENCY	PERCENTAGE %
Husband/partner age		
19 - 28	101	24.0
29 - 38	230	54.5
39 - 48	87	20.6
49 - 58	3	0.7
59 - 68	1	0.2
Husband/Partner's level of education		
Never went to school	22	5.2
Primary	18	4.3
Junior high school	80	19.0
Secondary school	125	29.6
Tertiary school	177	41.9
Husband/Partner's employment status		
Unemployed	20	4.7
Self-employed	211	50.0
Government employed	148	35.1
Private employed	43	10.2

Source: Author's data.

Table 5. Pregnant women's expectations. (N = 422)

VARIABLE	FREQUENCY	PERCENTAGE %
Should men accompany the partners to antenatal clinic		
Yes	403	95.5
No	19	4.5
Often should a man follow his wife to antenatal clinic		
Once	19	4.5
As many times as possible	256	60.7
All the time	128	30.3
Not applicable	19	4.5
Partner ever followed you to antenatal clinic		
Yes	210	49.8
No	212	50.2
Why did he not follow you?		
He goes to work	141	33.4
He is not available	49	11.6
Never inform him to follow	8	1.9
He refused to follow	14	3.3
Not applicable	210	49.8
Done an ultrasound scan in this pregnancy		
Yes	414	98.1
No	8	1.9
Did your partner follow you?		
Yes	149	35.3
No	265	62.8
Not applicable	8	1.9
Sex of the fetus would influence your partner supporting you		
Yes	179	42.4
No	243	57.6
Partner helps with the house chores		
Yes	398	94.3
No	24	5.7
Why shouldn't he?		
I feel it is not right because he is the man of the house	22	5.2
I have siblings with me so do not see the need for him to do that	2	0.5
Necessary to educate men whose wives are pregnant		
Yes	416	98.6
No	6	1.4

Continued

What should they be taught (<i>multiple response</i>)		
Effect of pregnancy on the women	308	73.0
How to take care of a pregnant woman	381	90.3
How to tolerate their partners	329	78.0
Sex during pregnancy	313	74.2
How to prepare for emergencies (blood donation, transportation and finance)	355	84.1

Source: Author's data.

Of those who indicated that it was necessary to educate male partners, suggested these areas; on the effect of pregnancy on the women 73.0%, how to take care of a pregnant woman 90.3%, how to tolerate their partners 78.0%, Sex during pregnancy 74.2%, and how to prepare for emergencies (blood donation, transportation and finance) 84.1%.

As indicated in **Table 6**, the results revealed that 96.6% of women who were Christians expected that male partners follow them to antenatal care service, and 3.4% felt that it is not necessary. Muslim women (92.5%) expected that male partners followed them to antenatal care service, and 7.5% felt that it is not necessary. The religion of the participants was found to be associated with the expectation of pregnant women wanting their male partner's involvement in antenatal care service at the 0.05 significant level with P-value of 0.000, <0.05.

With regard to marital status, 96.7% of the married women expected that their male partners followed them to antenatal care service, and 3.3% felt that it is not necessary. Single (73.7%) women expected that their male partners followed them to antenatal care service, and 26.3% felt that it is not necessary. The marital status of the participants was significantly related to the expectation of pregnant women wanting their male partners' involvement in antenatal care service with a P-value of 0.002, <0.05. The level of education and employment status were not associated with the expectation of pregnant women wanting their male partners' involvement in antenatal care service with P-values of 0.871 and 0.828, >0.05 respectively.

Table 7 shows the results of the crosstabulation of the demographic characteristics and male partners' help in house chores. The result revealed that 95.1% of the participants who were Christians expected their male partners' support in the house activities, 92.5% were Muslims whilst traditionalist did not expect their male partners to take care of the house chores. Religion was found to have an influence on women's expectations of male partners helping in house chores with a P-value of 0.000, <0.05. Again, the result showed that participants who were married (95.1%), cohabiting (69.2%), single (89.5%) and separated (100%) expected their male partners to support them with house chores. The chi-square test revealed that marital status had a significant influence on male partners support in house chores with P-value of 0.001, <0.05. The level of education of the

participants was found to have a relationship with expectation of pregnant women that male partners helped them in doing house chores, with P-value of 0.027, <0.05.

The employment status of the participants was not related to expectation of pregnant women that their male partners support them in the house activities with a p-value of 0.106, >0.05.

Table 6. Crosstabulation between demographic characteristics and men following to antenatal care clinic.

VARIABLE	Should men accompany the partners to antenatal clinic		Total	Chi-square value	p-value
The participants religion	Yes	No			
Christianity	316 (96.6%)	11 (3.4%)	327 (100.0%)	12.593	0.002
Islamic	86 (92.5%)	7 (7.5%)	93 (100.0%)		
Traditionalist	1 (50.0%)	1 (50.0%)	2 (100.0%)		
Total	403 (95.5%)	19 (4.5%)	422 (100.0%)		
Marital status					
Married	376 (96.7%)	13 (3.3%)	389 (100.0%)	44.068	0.000
Cohabiting	13 (100.0%)	0 (0.0%)	13 (100.0%)		
Single	14 (73.7%)	5 (26.3%)	19 (100.0%)		
Separated	0 (0.0%)	1 (100.0%)	1 (100.0%)		
Total	403 (95.5%)	19 (4.5%)	422 (100.0%)		
Level of education					
Never went to school	20 (95.2%)	1 (4.8%)	21 (100.0%)	1.245 ^a	0.871
Primary	43 (93.5%)	3 (6.5%)	46 (100.0%)		
Junior high school	82 (94.3%)	5 (5.7%)	87 (100.0%)		
Secondary school	119 (96.7%)	4 (3.3%)	123 (100.0%)		
Tertiary school	139 (95.9%)	6 (4.1%)	145 (100.0%)		
Total	403 (95.5%)	19 (4.5%)	422 (100.0%)		
Employment status					
Unemployed	69 (95.8%)	3 (4.2%)	72 (100.0%)	1.494 ^a	0.828
Self-employed	201 (94.8%)	11 (5.2%)	212 (100.0%)		
Government employed	88 (95.7%)	4 (4.3%)	92 (100.0%)		
Private employed	26 (100.0%)	0 (0.0%)	26 (100.0%)		
Housewife	19 (95.0%)	1 (5.0%)	20 (100.0%)		
Total	403 (95.5%)	19 (4.5%)	422 (100.0%)		

Source: Author's data.

Table 7. Crosstabulation between demographic characteristics and male Partners help with the house chores.

VARIABLE	Male Partners help with the house chores		Total	Chi-square value	p-value
Religion	Yes	No			
Christianity	311 (95.1%)	16 (4.9%)	327 (100.0%)	32.813	0.000
Islamic	86 (92.5%)	7 (7.5%)	93 (100.0%)		
Traditionalist	0 (0.0%)	2 (100.0%)	2 (100.0%)		
Total	397 (94.1%)	25 (5.9%)	422 (100.0%)		
Marital status					
Married	370 (95.1%)	19 (4.9%)	389 (100.0%)	15.938 ^a	0.001
Cohabiting	9 (69.2%)	4 (30.8%)	13 (100.0%)		
Single	17 (89.5%)	2 (10.5%)	19 (100.0%)		
Separated	1 (100.0%)	0 (0.0%)	1 (100.0%)		
Total	397 (94.1%)	25 (5.9%)	422 (100.0%)		
Level of education					
Never went to school	17 (81.0%)	4 (19.0%)	21 (100.0%)	10.962 ^a	0.027
Primary	43 (93.5%)	3 (6.5%)	46 (100.0%)		
Junior high school	81 (93.1%)	6 (6.9%)	87 (100.0%)		
Secondary school	114 (92.7%)	9 (7.3%)	123 (100.0%)		
Tertiary school	142 (97.9%)	3 (2.1%)	145 (100.0%)		
Total	397 (94.1%)	25 (5.9%)	422 (100.0%)		
Employment status					
Unemployed	66 (91.7%)	6 (8.3%)	72 (100.0%)	7.637 ^a	0.106
Self-employed	195 (92.0%)	17 (8.0%)	212 (100.0%)		
Government employed	90 (97.8%)	2 (2.2%)	92 (100.0%)		
Private employed	26 (100.0%)	0 (0.0%)	26 (100.0%)		
Housewife	20 (100.0%)	0 (0.0%)	20 (100.0%)		
Total	397 (94.1%)	25 (5.9%)	422 (100.0%)		

Source: Author's data

3.3. Pregnant Women's Expectations from the Male Partners during Labour and Delivery

Also, in **Table 8**, the results showed that the majority of 413 (97.9) of the participants will like to be accompanied during labor and delivery whilst 9 (2.1%) have a different view. Of those who will like to be accompanied, most 191 (45.3%) cited their partner, 104 (24.6%) their mothers, 90 (21.3%) mother-in-law, 27 (6.4%) their sisters and 1 (0.2%) their friends.

The participants gave reasons why male partners should be present during labor and delivery. Results, also in **Table 7**, showed that a little above half 220

(52.1%) cited that their presence would provide support to them, 102 (24.2%) said they would have an experience of what the women go through during labor, and 79 (18.7%) said so that they could attend to emergencies if the need arises. The result further showed that 61.6% of the participants delivered in the health facility during their previous delivery whilst 1.2% did not. The majority (96.9%) of the participants expected that their male partners accompanied them to antenatal care service and during labor and delivery whilst 3.1% did not.

As indicated in **Table 9**, the result showed that married participants were (97.4%), cohabiting (100%), single (100%) expected someone followed them to health facility during labor and delivery whilst participants who were separated did not. The marital status of the participant was found to be associated with the expectation of someone to follow when they were in labor with p -value 0.000, <0.05 . Furthermore, the result indicated that Christian (97.9%), muslims (95.7%) and traditionalists expect someone to follow them to health facility during labor and delivery. Participants who never had formal education (95.2%), primary (97.8%), JHS (96.6%), SHS (95.9%) and tertiary level expected that they went with someone to health facility during labor and delivery.

Table 8. Pregnant women's expectations from the male partners during labor and delivery (N = 422).

VARIABLE	FREQUENCY	PERCENTAGE%
Like someone to be with you during labour and delivery		
Yes	413	97.9
No	9	2.1
Who will you like to be with you		
Your partner	191	45.3
Your mother	104	24.6
Your mother-in-law	90	21.3
Your sister	27	6.4
A friend	1	0.2
Not applicable	9	2.1
Reasons men accompany their partners during delivery		
To provide support to me	220	52.1
To experience what we go through during labour	102	24.2
To attend to emergencies in case need arises	79	18.7
Non-respond	21	5.0
Reasons men stay away during delivery		
His presence is not needed as my mother is there	78	18.5
His presence will not do anything to me	28	6.6
Non-respond	316	74.8

Continued

What influenced your opinion		
Culture	17	4.0
Religion	46	10.9
Personal	355	84.1
Non-respond	4	0.9
Partner present at previous delivery		
Yes	195	46.2
No	70	16.6
Not applicable	157	37.2
What was the outcome of your partner's presence at delivery		
He processed my folder and did errands for me	7	1.7
He massaged my back when i was crying	1	.2
He paid for the medicines prescribed for me	13	3.1
He supported me	108	25.6
I had safe delivery	66	15.6
Not applicable	227	53.8
Why was he absence at previous delivery		
He had travelled by then	60	14.2
He will not be able to with stand it	10	2.4
Not applicable	352	83.4
Previous delivery in the health facility		
Yes	260	61.6
No	5	1.2
Not applicable	157	37.2
Like partner to follow you during antenatal, labour and delivery		
Yes	409	96.9
No	13	3.1

Source: Author's data.

4. Discussion

4.1. Background Characteristics of the Participants

The findings of this study showed that the mean age of the participants was 27.82 with the most within the age group 25 - 29. The mean age of husbands/partners was 33.27. The mean age difference between participants and their male partners was found to be significant. This finding could mean that women in general always prefer to marry a man who is a little older than them. Most of the participants have had tertiary education and few of them never had basic education. This finding suggests that there is improvement in education of female children. However, there is a need to do more in educating girl children.

Table 9. Crosstabulation between demographic characteristics and someone follows during labour and delivery. (N = 422)

VARIABLE	Someone to follow during labour and delivery		Total	Chi-square value	p-value
Marital status	Yes	No			
Married	379 (97.4%)	10 (2.6%)	389 (100.0%)	38.222 ^a	0.000
Cohabiting	13 (100.0%)	0 (0.0%)	13 (100.0%)		
Single	19 (100.0%)	0 (0.0%)	19 (100.0%)		
Separated	0 (0.0%)	1 (100.0%)	1 (100.0%)		
Total	411 (97.4%)	11 (2.6%)	422 (100.0%)		
Religion					
Christianity	320 (97.9%)	7 (2.1%)	327 (100%)	3.790 ^a	0.435
Islamic	89 (95.7%)	4 (4.3%)	93 (100.0%)		
Traditionalist	2 (100.0%)	0 (0.0%)	2 (100.0%)		
Total	411 (97.4%)	11 (2.6%)	422 (100.0%)		
Level of education					
Never went to school	20 (95.2%)	1 (4.8%)	21 (100.0%)	3.790 ^a	0.435
Primary	45 (97.8%)	1 (2.2%)	46 (100.0%)		
Junior high school	84 (96.6%)	3 (3.4%)	87 (100%)		
Secondary school	118 (95.9%)	5 (4.1%)	123 (100.0%)		
Tertiary school	144 (99.3%)	1 (0.7%)	145 (100.0%)		
Total	411 (97.4%)	11 (2.6%)	422 (100.0%)		
Employment status					
Unemployed	71 (98.6%)	1 (1.4%)	72 (100.0%)	7.833 ^a	0.098
Self-employed	202 (95.3%)	10 (4.7%)	212 (100.0%)		
Government employed	92 (100.0%)	0 (0.0%)	92 (100.0%)		
Private employed	26 (100.0%)	0 (0.0%)	26 (100.0%)		
Housewife	20 (100.0%)	0 (0.0%)	20 (100.0%)		
Total	411 (97.4%)	11 (2.6%)	422 (100.0%)		

Source: Author's data.

Regarding employment, a little above half of the participants indicated that they were self-employed and few of the participants were not employed and serve as housewives. This finding confirms unemployment level in the country but it is good that people are involved in self-employment.

With regards to the educational level of partners of the participants, the findings showed that most of them had had tertiary education, and few of them had never had formal education. Furthermore, half of the participants were self-employed, few were in the government sector, private sector and unemployed. This finding suggests that males in the region tend to educate them-

selves than their female partners and are employed in the formal sector of the economy.

4.2. Pregnant Women's Expectations from the Male Partners during Pregnancy

This study's findings revealed that the majority of the participants expected their male partners accompany them to antenatal care clinic and few felt it is not necessary. Those who expected their male partner to accompany them, indicated that the male partner can do so as many times as possible to antenatal care clinic. This study's finding suggests the need for the male partners' involvement in the care of their female partners during pregnancy and labor. This finding is in line with previous study that almost all women included in the study preferred being accompanied by their husbands to antenatal care services which reduces the risks of pregnancy and childbirth complications [2].

This study's findings revealed that half of the participants' male partners never accompanied them to antenatal care clinic at the time of the data collection whilst nearly half of the participants indicated that their male partners did follow them. Those who indicated that their male partners never accompanied them gave reasons as follow, male partner goes to work, he was not available, he refused to follow them and participants never inform the partner to accompany them. This study finding suggests that male partners do not support their wives during pregnancy. Again, this finding could also explain the belief that men are to work and take care of their female partners in this part of the world. This current finding supports previous finding that most men in developing countries do not participate and unsupportive in the matter of pregnancy and childbirth [7].

Again, the findings of this research revealed that the majority of the participants did ultrasound scans at the time of data collection. Of those who did an ultrasound scan, majority of the participants' male partners did not accompany them. This current finding is in line with the previous finding that most men in developing countries do not participate and unsupportive in the matter of pregnancy and childbirth [7].

On the aspect of whether the sex of the fetus influences male partners to support their wives during pregnancy, more than half of them think that knowing the sex of the fetus will not have influence on male partner support and less than half indicated that knowing sex of the fetus can influence male partners to support them. This mixed response could mean that men who are interested in a particular sex of a child would support and participate in the care of their partner during pregnancy and after birth.

This study's findings revealed that the majority of the participants expected their male partners should support them in doing house chores during pregnancy. However, some felt that male partners do not need support. Those who said male partners do not need to support in house chores gave various reasons; it is not the work of males and they have sibling to support. This study finding

explains that in the modern days women now feel that their male partners can support them in the activities in the house instead of the notion that women do all house chores.

This study's findings showed that the pregnant women expected their male partners to be educated on how to support them during pregnancy. The majority of the participants indicated, it was necessary to educate male partners whose wives are pregnant how to support and care for them. Of those who indicated it was necessary to educate male partners, suggested these areas; on the effect of pregnancy on the women, how to take care of a pregnant woman, how to tolerate their partners, Sex during pregnancy, and how to prepare for emergencies (blood donation, transportation and finance). This finding suggests that women expect a lot from their male partners during pregnancy and after birth. Therefore, men need to be educated on the maternal health care. This finding is similar to the finding from a previous study that most men in developing countries know little about pregnancy and childbirth, making them not get involved during pregnancy and childbirth unless the midwife or doctor urgently requests the husbands' involvement [4].

This research's findings revealed that religion and marital status of the participants were found to be associated with the expectation of pregnant women wanting their male partners support in antenatal care service. This finding suggests that being Christian or Muslim influences the expectation on their male partners assisting them during pregnancy and after birth.

The level of education and employment status were found not to be associated with the expectation of pregnant women wanting their male partners involvement in antenatal care service. This current finding contradicts a study conducted in Nigeria, which found that educated and employed women had good perception towards male involvement during pregnancy and labour compared to their colleagues who were not educated and employed [4].

This study finding revealed that of the participants who were either Christians or Muslim expected their male partners to support them in the house activities, whilst traditionalist expectation was different. The religion of the participants was found to have influence on women expectation on male partners helping in house chores. This current study's findings suggest that religion of the women has impacted positively on their decisions making with regard to health care.

Again, this study's findings showed that participants who were either married, cohabiting, single or separated expected their male partners to support them with house chores. It was revealed that marital status had a significant influence on male partners support in house chore. The level of education of the participants was found to have relationship with expectation of pregnant women that male partners help them in doing house chores. This study finding could mean that pregnant women in general expect their male partners to support them in house activities. This finding supports a similar study finding that educational level of the expectant father concerning pregnancy and childbirth influences

their involvement during pregnancy and childbirth [8].

The findings of this study revealed that employment status of the participants was not having influence on the expectation of pregnant women that their male partners support them in house activities. This finding implies that whether a pregnant woman is employed or not, does not change her feeling about the male partner supporting in the house activities. This current finding contradicts a study conducted in Nigeria, which found that employed women had good perception of male involvement during pregnancy and labor compared to their colleagues who were not educated and employed [4].

4.3. Pregnant Women's Expectations from the Male Partners during Labor and Delivery

This study's findings showed that the majority of the participants would like to be accompanied during labor and delivery with few having different views. Of those who would like to be accompanied, most of them cited their male partner, others preferred their mothers, mother-in-law, their sister and their friends. This current finding is similar to a study finding that men did not prefer to be in labor and delivery room with their wives but rather preferred mother-in-law, sisters and other females [2].

The participants gave various reasons why male partners should be present during labor and delivery. These were; to provide support to them, to experience what the women go through during labor, and to attend to emergencies in case need arises. This explains that women feel that their male partners are the source of their support in terms of maternal health care and therefore the need to encourage male involvement in maternal health care. This finding supports a previous study finding in Tanzania that men were responsible for birth preparedness items, finance and transport before, during and after delivery [2].

This study finding showed the majority of the participants delivered in the health facility during their previous delivery with very few given births at home. This suggests that pregnant women have improved on utilization of health personnel services during labor and delivery.

This study finding revealed that participants who were either married, cohabiting or single expected someone to follow them to health facility during labor and delivery whilst participants who were separated did not. This explains that when a pregnant woman is not more with her male partner, she will not have someone to accompany her during labor to health facility. Again, this finding showed that marital status of the participants was found to be associated with expectation of someone to accompany them when they are in labor. This study finding revealed that participants who were Christian or Muslim expected someone accompanies them to health facility during labor and delivery. However, a pregnant woman who is a traditionalist does not prefer a male partner to accompany her to health facility during labor and delivery. This explains that women are still holding onto culture and tradition that labor and delivery are

not the job of a man.

5. Conclusion

This study's findings showed that pregnant women always want their male partners to accompany them to antenatal care and during labor and delivery. The pregnant women expected their male partners to be educated on the effects of pregnancy, how to take care of a pregnant woman, how to tolerate their partners, Sex during pregnancy, and how to prepare for emergencies (blood donation, transportation and finance).

Acknowledgements

The authors would like to express gratitude to all the participants, Bolgatanga Municipal Health Director and the Institutional Review Board (IRB) of the Navrongo Health Research Center for granting approval and co-operation throughout the period of the study.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] World Health Organization (2015) WHO Recommendations on Health Promotion Interventions for Maternal and Newborn Health. World Health Organization, Geneva.
- [2] Maluka, S.O. and Peneza, A.K. (2018) Perceptions on Male Involvement in Pregnancy and Childbirth in Masasi District, Tanzania: A Qualitative Study. *Reproductive Health*, **15**, Article No. 68. <https://doi.org/10.1186/s12978-018-0512-9>
- [3] Paulos, K., Awoke, N., Mekonnen, B. and Arba, A. (2020) Male Involvement in Birth Preparedness and Complication Readiness for Emergency Referral at Sodo Town of Wolaita Zone, South Ethiopia: A Cross Sectional Study. *BMC Pregnancy and Childbirth*, **20**, Article No. 62. <https://doi.org/10.1186/s12884-020-2758-9>
- [4] Ojo, I.O., Fafure, A.A. and Ani, O.B. (2019) Women's Perception of Male Involvement during Pregnancy and Labour in University College Hospital, Ibadan. *International Journal of Nursing and Midwifery*, **11**, 103-109. <https://doi.org/10.5897/IJNM2019.0373>
- [5] Ghana Statistical Service (GSS), Ghana Health Service (GHS) and ICF (2018) Ghana Maternal Health Survey 2017. GSS, GHS, and ICF, Accra. <https://www.dhsprogram.com/>
- [6] Aborigo, R.A., Reidpath, D.D., Oduro, A.R. and Allotey, P. (2018) Male Involvement in Maternal Health: Perspectives of Opinion Leaders. *BMC Pregnancy and Childbirth*, **18**, Article No. 3. <https://doi.org/10.1186/s12884-017-1641-9>
- [7] Natai, C.C., Gervas, N., Sikira, F.M., Leyaro, B.J., Mfanga, J., Yussuf, M.H. and Msuya, S.E. (2020) Association between Male Involvement during Antenatal Care and Use of Maternal Health Services in Mwanza City, Northwestern Tanzania: A Cross-Sectional Study. *BMJ Open*, **10**, e036211. <https://doi.org/10.1136/bmjopen-2019-036211>

- [8] Addai-Mensah, O., Annani-Akollor, M.E., Fondjo, L.A., Sarbeng, K., Anto, E.O., Owiredo, E.W. and Arthur, S.N. (2018) Regular Antenatal Attendance and Education Influence the Uptake of Intermittent Preventive Treatment of Malaria in Pregnancy: A Cross-Sectional Study at the University Hospital, Kumasi, Ghana. *Journal of Tropical Medicine*, **2018**, Article ID: 5019215. <https://doi.org/10.1155/2018/5019215>
- [9] Mersha, A.G. (2018) Male Involvement in the Maternal Health Care System: Implication towards Decreasing the High Burden of Maternal Mortality. *BMC Pregnancy and Childbirth*, **18**, Article No. 493. <https://doi.org/10.1186/s12884-018-2139-9>
- [10] Ghana Statistical Service (GSS) (2021) Ghana 2021 Population and Housing Census General Report Volume 3A: Population of Regions and Districts. GSS, Accra. <https://census2021.statsghana.gov.gh/>
- [11] Araoye, M.O. (2003) Research Methodology with Statistics for Health and Social Sciences. Nathadex Publishers, Ilorin.