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Mistreatment of Women in Health Facilities by Midwives during Childbirth in Ghana: Prevalence and Associated Factors

John Kuumuori Ganle and Ebenezer Krampah

Additional information is available at the end of the chapter

Abstract

Studies have shown that many women worldwide experience mistreatment during pregnancy and childbirth. However, there are few quantitative estimates of the prevalence of mistreatment of women during facility-based childbirth in many developing countries including Ghana. Based on a cross-sectional retrospective survey of 253 randomly selected women who gave birth between November 2017 and April 2018 in a second-tier referral hospital in Ghana, this study examines mistreatment of women by midwives during childbirth and associated factors. Bivariate and logistic regression analyses were performed at 95% confidence level and $p < 0.05$. Results show that 83% of women were mistreated. Manifestations of mistreatments included detention for non-payment of bills (43.1%), non-confidential care (39.5%), abandonment (30.8%), verbal abuse (25.3%), discrimination (21.3%), physical abuse (14.2%) and non-consented care (13.3%). Factors that significantly independently predicted mistreatment after potential confounders were controlled for were being HIV positive (aOR: 0.11; 95% CI = 0.022–0.608; $p = 0.011$), being attended by a midwife rather than an obstetrician/gyneacologist (aOR: 0.07; 95% CI = 0.018–0.279; $p < 0.01$), and a woman's husband earning lower monthly income. There is need for interventions to train midwives and other maternity care service providers in patient-centered care and interpersonal communication so as to minimize mistreatment of women during childbirth.

Keywords: mistreatment, pregnancy and childbirth, respectful maternal care, midwives, Ghana

1. Introduction

Worldwide, a growing body of research suggests that, many women experience poor treatment during childbirth [1–4]. While the WHO [5] continues to emphasise that every woman has the right to the highest attainable standard of health, which includes the right to dignified and respectful healthcare, many women are reported to experience disrespectful and abusive treatment during pregnancy and childbirth in health facilities worldwide [1–4]. Such mistreatment includes physical abuse, non-consented care, non-confidential care, non-dignified care including verbal abuse, discrimination based on specific attributes, abandonment of care and detention in health facilities [1–4].

Mistreatment of women in health facilities during childbirth is particularly worse in many low-income countries in Africa [6, 7]. For instance, a recent study showed that the prevalence of any form of mistreatment in an exit survey among a sample of 641 women who recently delivered in healthcare facilities in Kenya was 20% [8]. Another study revealed that 15% of women who delivered in a referral hospital in Tanzania reported experiencing one or more forms of abusive and disrespectful care, and this proportion reached to 78% among women who delivered in healthcare facilities in Ethiopia [2]. A systematic review also mentions in southeastern Nigeria that mistreatment of women in a teaching hospital was almost universal such that all of the women reported at least one kind of mistreatment during childbirth [9]. Women commonly reported physical abuse (35.7%), including being "restrained or tied down during labour" (17.3%) and being "beaten, slapped, or pinched" (7.2%); while being "sexually abused by a health worker" was reported by 2.0% of the women [9]. Similarly, a qualitative study exploring mistreatment of women in rural Tanzania estimated that 19.5% of women who reported experiencing any form of mistreatment during childbirth in the facility increased to 28.2% during a follow up survey of same women within 5–10 weeks postpartum [10]. Some 18.9% of the women reported receiving non-dignified care; 13.8% reported being abused verbally; 15.5% reported being neglected; and 5.1% reported being abused physically [10]. In Ghana, previous qualitative research has also documented that mistreatment during facility-based delivery is a salient issue, that sometimes prevent women from seeking skilled birth services [4, 11, 12].

Given the potential for mistreatment during childbirth to undermine future use of skilled birth services in health facilities, the WHO [5] has called for greater research, action, advocacy and dialogue on this important public health issue, in order to ensure safe, timely, and respectful care during childbirth for all women. Likewise, respectful care is a key component of both the mother-baby friendly birth facility initiative currently being implemented in many low-income settings, and the WHO's vision for quality of care for childbearing women and newborns [5]. To date, however, there have been few quantitative estimates of the prevalence of mistreatment of women during facility-based childbirth in Ghana and the determinants of such mistreatment [4, 13]. This knowledge gap could potentially hamper efforts to ensure that all women receive respectful and dignified care during pregnancy and childbirth in Ghana.

The study reported in this chapter was therefore undertaken to respond to the WHO's call for greater research on the topic of mistreatment of women during childbirth. Specifically, the objective was to determine the prevalence and forms of mistreatment of women by midwives during childbirth and associated factors. Results, which are presented and discussed below, suggest that mistreatment of childbearing women in health facilities is indeed an important issue in contemporary midwifery and nursing care in Ghana that needs to be urgently addressed.

The rest of the chapter proceeds as follows. The empirical research methods are next described. Results are then presented, followed by a discussion of the results. The final section concludes with some recommendations.

2. Materials and methods

2.1. Study design

A health facility-based retrospective cross-sectional quantitative survey was conducted. Validated survey questionnaires were used to collect data to estimate the prevalence of mistreatments women received during their most recent childbirth, and also determine the association between various exposure variables and the outcome of interest—mistreatment.

2.2. Study setting

Empirical research was conducted in Ghana, a low-income country in West Africa. Ghana is one of the countries in Africa where maternal mortality remains a challenge. For instance, out of 5247 deaths among women aged 15–49 in 2014, 12.1% (634) were pregnancy-related [4]. Low levels of health facility delivery are partly responsible for this relatively high number of maternal deaths [11, 12]. Recent data suggest that out of 794,000 live births annually in Ghana, only 76% are attended by skilled professionals [14]. Despite the fact that the Government of Ghana has implemented initiatives to increase facility-based delivery, including making antenatal care and skilled delivery free [15], giving special attention to pregnant women to easily complete the processes of the National Health Insurance Scheme (NHIS) registration and waiving enrolment fees into the NHIS, as well as scaling up safe motherhood and child survival interventions [16], many women in Ghana still give birth outside health facilities without skilled care [14]. Recent studies have suggested poor quality of maternal healthcare services and mistreatment of women as key reasons why some women in Ghana do not deliver in health facilities [4, 11, 12].

Within Ghana, empirical data collection took place in the Tema General Hospital in the Tema Metropolis of the Greater Accra region. The population of the Tema Metropolis, according to the 2010 Population and Housing Census, is 292,773, representing 7.3% of the region's total population [17]. Females represent 52.2% of the total population of the metropolis. Also,

nearly all of the population in the metropolis lives in urban localities [17]. The Metropolis has five government health facilities, 58 private health facilities, four quasi-government facilities and 32 community-based health planning and services (CHPS) zones [18]. The Tema General Hospital serves as the main referral Hospital in the Metropolis with regard to maternal healthcare for both private and public health facilities [18]. This is the main reason why it was chosen for this study. The maternity block of the Hospital has a total of 294-bed capacity [18]. The facility recorded 7000 deliveries in the year 2016, of which 2035 were deliveries by caesarean section and 41 maternal deaths [18].

2.3. Study population

The study's population comprised all women who had given birth at the Tema General Hospital between November 2017 and April, 2018. However, women who had complicated births as well as women who had stillbirths were excluded. We excluded these categories of women because complicated or stillbirths may typically require additionally invasive interventions which could unduly affect women's judgement about mistreatment. Besides, women who go through complicated birth or stillbirth may experience physical and emotional stress, which could also affect their judgement about mistreatment during childbirth.

2.4. Sample size estimation

A minimum sample size of 230 was first estimated using Cochran's statistical formula for cross-sectional studies [19]. The sample size estimation was based on the following assumptions:

1. Confidence level was set at 95%.

2. Prevalence of mistreatment of women in the sample was assumed to be 20%. This assumption was based on a recent study in Kenya which found overall prevalence of mistreatment to be 20% [8].

3. Margin of error (5% = 0.05).

The minimum sample size of 230 was adjusted upward by 10% to cater for possible incompleteness of data. Thus, the final sample size for the study was 253.

2.5. Sampling procedure

A simple random sampling method was used to select the 253 respondents. To ensure that each qualified potential respondent in the sampling frame had equal chance of being included in the study, the register of all women who had given birth in the facility between November 2017 and April, 2018 and were attending child welfare clinic (CWC) at the Tema General Hospital was obtained from the senior nursing officer of the maternity unit. Using the inclusion and exclusion criteria outlined above, the names of all women who had live and uncomplicated births were compiled in excel spreadsheet. In all, a total of 2357 potentially qualified women

were identified. Each of the 2357 women was then given a unique number, starting from 0001 to the last woman on the list i.e. 2357. The numbered list was then exported into a Google-based random number generator software and the 253 respondents were randomly selected. Following this selection, a visit was made to the CWC of the Tema General Hospital to meet each selected woman on the day she was scheduled to attend the CWC. During this meeting, we explained the purpose of the study to selected women as well as how they were selected. The women were then given time (2 weeks) to decide their participation. After the 2 weeks, each woman was contacted via telephone. Where the decision was in favour of participation, a date and interview venue were agreed upon between the authors and each woman. Most women agreed to do the interview during their next visit to the CWC, which happened between May and July 2018. However, for any selected woman who did not come to the CWC in the course of the study (there were 3 such cases) or opted not to take part in the study (there were 4 such cases), such women were replaced by repeating the random selection process on the remainder of the women not selected in previous round/s of random selection.

2.6. Data collection methods and instruments

Data was collected through face-to-face survey from May to July, 2018. A structured, closed-ended questionnaire was designed for the data collection. The questionnaire focused on collecting information on a number of issues including socio-demographic characteristics, reproductive and maternal health history, and experiences of mistreatment during childbirth. We adopted and adapted several validated questions from previous researchers [1–3, 8, 20, 21], based on Bowser and Hill's [22] typology of mistreatment. Our operational definitions of the specific components of mistreatment we were interested in are summarised in **Table 1**. The questionnaires were in English, but were asked in English and three other local dialects (*Ga*, *Twi*, and *Ewe*) depending on which one a respondent was fluent in. The second author who collected the data speaks all three local dialects fluently.

Category of mistreatment	Example
Physical abuse	Hitting, roughly forcing legs apart for delivery
Non-consented care	No informed consent for procedures, such as when provider elects to perform unnecessary episiotomy
Non-confidential care	No privacy (spatial, visual, or auditory)
Non-dignified care	Humiliation by shouting, blaming, or degrading
Discrimination based on specific patient attributes	HIV status, ethnicity, age, marital status, language, economic status, educational level, etc.
Abandonment of care	Facility closed despite being 24/7, or if open, no staff can or do attend delivery
Detention in facilities	Not releasing mother until bill is paid

Table 1. Type and definition of mistreatment.

2.7. Pre-test and quality assurance

The questionnaires were pre-tested in the CWC of another public health facility in the Tema Metropolis using 20 randomly selected mothers who gave birth between November 2017 and April 2018. The pretest enabled ambiguities in the wording of some questions to be corrected. The pretest also enabled us estimate the average time required to complete each questionnaire. In addition to the pretesting, other quality assurance measures were implemented. Data collected by the second author were checked every day by the first author to ensure accuracy and completeness. Errors that were detected were discussed and where needed, follow up interviews were made to correct any such errors.

2.8. Data processing and analysis

2.8.1. Data entry and processing

The completed questionnaires were hand-coded and entered into Microsoft Excel. The data were then exported to Stata 15 version software for further cleaning. Cleaning of the data was done by running frequencies on each variable. This checked inconsistently coded data. Inconsistently coded data were double checked with raw data from the questionnaire, and all inconsistencies and errors were resolved.

2.8.2. Variables

The dependent variable in this study is mistreatment of women during childbirth. Mistreatment was defined as specific behaviours of providers, which are related to any of the seven categories of mistreatment listed in **Table 1**, and expressed towards mothers in ways that are disrespectful or humiliating [23]. Questions on mistreatments were measured as dichotomous, such that any respondent who reported experiencing any of the seven categories of mistreatment in **Table 1** was considered mistreated.

A number of independent variables expected to influence mistreatment were also measured. These included socio-demographic characteristics such as age, marital status, income level, educational level and religion. Other maternal and health system factors included mode of delivery, type of birth attendant, HIV status and antenatal care (ANC) attendance during pregnancy.

2.8.3. Statistical analysis

Descriptive statistical analysis (frequency, mean and standard deviation) was performed to describe important characteristics of respondents as well as estimate prevalence and forms of mistreatment women received during childbirth. Bivariate and logistic regression analyses were then performed to examine factors associated with mistreatment of women during childbirth. Statistical significance was considered at 95% confidence level and a $p < 0.05$.

2.9. Ethical issues

Ethical approval was sought and obtained from the Ghana Health Service Ethical Review Committee. In addition, administrative consent and approval to conduct the study in the hospital was sought and obtained from the director of medical services of the Tema General

Hospital. Participation in the study was entirely voluntary, and this was communicated to all selected respondents. Before interviews were conducted, each participant signed or thumb printed an informed consent form to confirm their voluntary consent to participate in the study. However, respondents were told that they could withdraw consent and discontinue their participation in the study without any adverse consequences. Also, as some aspects of the mistreatment some women received were emotionally traumatising for them to recount during our study, we ensured that all such women were referred to a clinical psychologist based at the same health facility for counselling. However, this process was entirely voluntary, and no woman was referred if she did not want to see the psychologist. In addition, interviews were conducted in a private room where maximum anonymity and confidentiality were ensured. No direct compensation or benefits were paid to respondents. However, each respondent received age and sex-appropriate toy for their baby worth only GH₵5 ($1).

3. Results

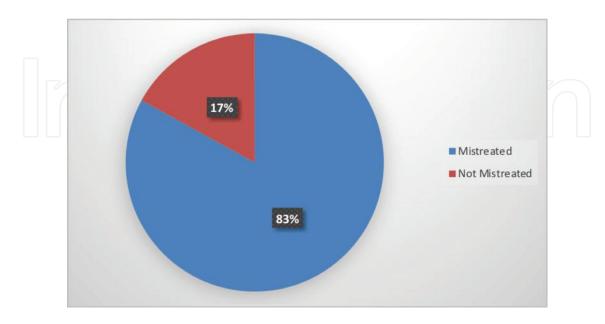### 3.1. Socio-demographic characteristics of respondents

Questionnaires were successfully completed for all the 253 respondents. **Table 2** shows the background characteristics of respondents. The mean age was 28.1 years (SD = ± 6.0). The majority (34.4%) were aged 24–29 years. The majority (32.4%) also attained secondary school education, while only 9.9% had no formal education. Also, 69.6% were heterosexually married, and most marriages (65.7%) were monogamous. Christians were in the majority (87.4%). In terms of parity, majority (86.2%) of the respondents had between 1 and 3 children.

Characteristics	Frequency	Percent (%)
Age		
15–19	13	5.15
20–24	63	24.90
25–29	87	34.39
30–34	49	19.37
35–39	26	10.28
40–44	15	5.93
Level of education		
No formal education	25	9.88
Primary	36	14.23
JHS	81	32.02
Secondary	82	32.41
Tertiary	29	11.46
Marital status		
Married	176	69.57
Separated	14	5.53

Characteristics	Frequency	Percent (%)
Co-habiting	28	11.07
Single	35	13.83
Type of marriage		
Monogamous	134	65.69
Polygamous	70	34.31
Religious affiliation		
Christianity	221	87.35
Islamic	29	11.46
Traditional	3	1.19
Residence		
Urban	241	95.26
Rural	12	4.74
Ethnicity		
Ga	54	21.43
Twi	56	22.22
Fante	36	14.29
Ewe	47	18.65
Others	59	23.41
Occupation		
Trading	100	39.53
Housewife	53	20.95
Seamstress	28	11.07
Hairdresser	23	9.09
Civil servants	25	9.88
Others	24	9.49
Monthly income (GH₵)		
No salary	57	22.53
<GHc500	165	65.22
GHc500–1000	22	8.70
>GHc1000	9	3.56
Parity		
1–3 children	218	86.17
4–7 children	35	13.83
Dependents		
1–3 dependants	169	85.79

Characteristics	Frequency	Percent (%)
4–7 dependants	28	14.21
Husbands' level of education		
No formal education	17	6.85
Primary	17	6.86
JHS	62	25.00
Secondary	99	39.92
Tertiary	53	21.37
Husband's occupation		
None	21	8.30
Trading	49	19.37
Civil servant	39	15.42
Farmer	16	6.32
Others	128	50.59
Husband's monthly income (GH₵)		
100–500	111	50.45
500–1000	77	35.00
1000–1500	21	9.55
2000–2500	11	5.00

Table 2. Socio-demographic characteristics.

Figure 1. Prevalence of mistreatment.

3.2. Prevalence of mistreatment

Figure 1 summarises the prevalence of mistreatment among the women surveyed. The overall prevalence of mistreatment was 83.0%. This included those who suffered at least one form of mistreatment in the facility during their most recent childbirth. The most common form of mistreatment was detention for long hours for non-payment of medical bills (43.1%), followed by non-confidential care (39.5%), abandonment (30.8%), verbal abuse (25.3%), discrimination (21.3%) and physical abuse (14.2%) (see **Table 3**).

Types of mistreatments	Description	Response	
		Yes (%)	No (%)
Physical abuse (n=253)	Hitting, beating, slapping, pitching, legs held.	36(14.2)	217(85.8)
Verbal abuse/Non-dignified (n=153)	Shouted at, reprimanded, insult.	64(25.3)	89(74.7)
Non-Confidential (n=253)	No privacy (spatial, visual, or auditory)	100(39.5)	53(60.47)
Non-Consented (n=240)	No informed consent for procedures, such as episiotomy, HIV status.	32(13.3)	208(86.67)
Discrimination (n=253)	Age, marital status, inadequate preparation, financial status.	54(21.3)	199(78.7)
Detention (n=253)	Not releasing mother until bill is paid.	109(43.1)	144(56.92)
Abandonment (n=244)	Leaving women to deliver alone, no help from providers after Cs	76(31.9)	168(68.9)

Table 3. Types of mistreatment women received.

Multiple experience of mistreatment	Frequency	Percent (%)
Experienced 2 forms of mistreatment		
Yes	65	25.69
No	188	74.31
Experienced 3 forms of mistreatment		
Yes	44	17.39
No	209	82.61
Experienced 4 forms of mistreatment		
Yes	28	11.07
No	225	88.93
Experienced 5 forms of mistreatment		
Yes	14	5.53
No	239	94.47
Experienced 6 forms of mistreatment		
Yes	1	0.83
No	252	99.60
Experienced 7 forms of mistreatment		
Yes	0	0
No	253	100

Table 4. Multiple experiences of mistreatments.

Characteristics	Mistreated		
	Yes	**No**	**Chi-square**
			P-value
Age			
15–19	7(58.33)	5(41.67)	0.046*
20–24	58(92.06)	5(7.94)	
25–29	74(85.06)	13(14.94)	
30–34	36(73.47)	13(26.53)	
35–39	19(73.08)	7(26.92)	
40–44	10(66.67)	5(33.33)	
Marital status			
Married	140(79.55)	36(20.45)	0.205
Separated	9(64.29)	5(35.71)	
Co-habiting	20(74.43)	8(28.57)	
Single	30(85.71)	5(14.29)	
Type of marriage			
Monogamous	105(78.36)	29(21.64)	0.072
Polygamous	62 (88.57)	8(11.43)	
Level of education			
No formal education	20(80.00)	5(20.00)	0.048*
Primary	72(88.89)	9(11.11)	
JHS	30(83.33)	6(16.67)	
Secondary	65(79.27)	17(20.73)	
Tertiary	19(65.52)	10(34.48)	
Residence			
Urban	198(82.16)	43(17.84)	0.228
Rural	7(58.33)	5(41.67)	
Religious affiliation			
Christianity	181(81.10)	40(18.10)	0.677
Islamic	22 (75.86)	7(24.14)	
Traditional	6(54.55.00)	5(45.45)	
Occupation			
Trading	85(85.00)	15(17.0)	0.384
Housewife	46(86.79)	7(13.21)	
Seamstress	22(78.57)	6(21.43)	

Characteristics	Mistreated		
	Yes	No	Chi-square P-value
Hairdresser	17(73.91)	6(26.09)	
Civil servants	17(68.00)	8(32.00)	
Others	18(75.00)	6(25.00)	
Monthly income (GH₵)			
No salary	51(89.47)	6(10.53)	0.045*
<GHc500	138(83.64)	27(16.36)	
GHc500–1000	16(72.73)	6(27.27)	
>GHc1000	6(54.55)	5(45.45)	
Ethnicity			
Ga	44(81.48)	10(18.52)	0.849
Twi	46(82.14)	10(17.86)	
Fante	29(80.56)	7(19.44)	
Ewe	39(82.98)	8(17.02)	
Others	52(88.14)	7(11.86)	
Parity			
1–3 children	180(82.57)	38(17.43)	0.646
4–7 children	30(85.71)	5(14.29)	
Dependents			
1–3 dependants	138(81.66)	31(18.34)	0.425
4–7 dependants	21(75.00)	7(25.00)	
Husbands' level of education			
No formal education	11(64.71)	6(35.29)	0.056
Primary	11(64.71)	6(35.29)	
JHS	57(91.94)	5(8.06)	
Secondary	77(77.47)	22(22.22)	
Tertiary	40(75.47)	13(24.53)	
Husband's occupation			
None	14(66.67).	7(33.33)	0.151
Trading	43(87.76)	6(12.24)	
Civil servant	30(76.92)	9(23.08)	
Farmer	10(62.50)	6(37.50)	
Others	103(80.47)	25(19.53)	

Characteristics	Mistreated		
	Yes	No	Chi-square
			P-value
Husband's monthly income (GH₵)			
100–500	97(87.39)	14(12.61)	0.002*
500–1000	64(83.12)	13(16.88)	
1000–1500	12(57.14)	9(42.86)	
2000–2500	6(54.55)	5(45.45)	

Table 5. Socio-demographic factors associated with mistreatments (bivariate analyses). *p < 0.05

Characteristics	Mistreated		
	Yes	No	Chi-square
			P-value
ANC attendance			
Yes	201(84.10)	38(15.90)	1.000
No	9(62.29)	5(35.71)	
Age of the baby (n = 200)			
1–3 months and below	120(85.71)	20(14.29)	0.201
4–6 months	90(79.65)	23(20.35)	
Mode of delivery			
Vaginal delivery	141(85.98)	23(14.02)	0.088
Caesarean section	69(77.53)	20(22.47)	
Birth attendant			
Obstetrician/gyneacologist	64(77.11)	19(22.89)	0.000*
Midwife	146(85.88)	24(14.12)	
HIV status			
Negative	151(95.32)	9(4.68)	0.009*
Positive	73(78.49)	20(21.51)	
Had episiotomy			
Yes	193(83.55)	38(16.45)	1.000
No	6(54.55)	5(45.45)	
Had a bed			
Yes	202(84.17)	38(15.83)	0.220
No	8(61.54)	5(38.46)	

Table 6. Maternal and health system factors associated with mistreatment (bivariate analyses). *p < 0.05

As shown in **Table 4**, many women experienced multiple forms of mistreatment during their most recent health facility delivery. The majority of women (25.7%) suffered from two types of mistreatment; 17.4% suffered three types of mistreatment; 11.1% suffered four different types of mistreatment; and 5.5% suffered five types of mistreatment. Only 0.8% of the women suffered six types of mistreatment, with no respondent reporting suffering all the seven types of mistreatment studied.

3.3. Factors associated with mistreatment

Table 5 presents information on bivariate analysis investigating the association between socio-demographic factors and mistreatment based on chi-square test of independence. Age of mother (p = 0.046), mother's level of education (p = 0.048), mother's monthly income (p = 0.045), and husband's monthly income (p = 0.002) were statistically significantly associated with mistreatment of women during their most recent childbirth in the Tema General Hospital. In addition to the socio-demographic factors, other maternal and health system factors were assessed. The results are shown in **Table 6**. A woman's HIV status (p = 0.009), as well as type of birth attendant during childbirth (p < 0.01) were statistically associated with mistreatment.

In total, six (6) factors showed statistical association with mistreatment at the bivariate level. These were pulled into a logistic regression model in a second round of analysis. A simple logistic regression analyses model, followed by a multiple logistic regression analyses model, were then performed on the six variables. The results are shown in **Table 7**. After adjusting

Characteristics	Mistreated Yes	No	Unadjusted OR (95%CI)	P-value	Adjusted OR (95%CI)	P-value
Age						
15-19 (ref)	7(58.33)	5(41.67)				
20-24	58(92.06)	5(7.94)	0.97(0.103-9.037)	0.976	0.97(0.1034-9.037)	0.976
25-29	74(85.06)	13(14.94)	0.47(0.057-3.966)	0.491	0.47(0.057-3.966)	0.491
30-34	36(73.47)	13(26.53)	0.23(0.027-1.954)	0.179	0.23(0.027-1.954)	0.179
35-39	19(73.08)	7(26.92)	0.25(0.025-2.075)	0.189	0.23(0.025-2.075)	0.189
40-44	10(66.67)	5(33.33)	0.23(0.022-2.377)	0.217	0 23(0.022-2377)	0.217
Level of Education						
No Formal Education (ref)	20(80.00)	5(20.00)				
Primary	72(88.89)	9(11.11)	1.09(0.222-5.362)	0.915	0.48(0.551-4.216)	0.509
JHS	30(83.33)	6(16.67)	1.09(0.271-4.385)	0.902	0.90(0.145-5.600)	0.910
Secondary	65(79.27)	17(20.73)	0.52(0.139-1.950)	0.333	0.37(0.061-2.238)	0.278
Tertiary	19(65.52)	10(34.48)	0.26(0.062-1.081)	0.064	0.41(0.042-4.045)	0.446
Mother's monthly income (GH₵)						
No salary (ref)	51(89.47)	6(10.53)				
<GHc500	138(83.64)	27(16.36)	0.60(0.235-1.541)	0.289	0.57(0.162-2.024)	0.386
GHc500-1000	16(72.73)	6(27.27)	0.31(0.089-1.110)	0.072	0.80(0.125-5.147)	0.816
>GHc1000	5(55.56)	4(44.44)	0.15(0.031-0.702)*	0.016	0.39(0.034-4.886)	0.462
Husband's monthly income (GH₵)						
100-500 (ref)	97(87.39)	14(12.61)				
500-1000	64(83.12)	13(16.88)	0.71(0.313-1.610)	0.413	0.53(0.1907-1.457)	0.217
1000-1500	12(57.14)	9(42.86)	0.19(0.069-0.539)*	0.002	0.19(0.041-0.883)*	0.034*
2000-2500	6(54.55)	5(45.45)	0.18(0.043-0.753)*	0.019	0.33(0.042-2.424)	0.274
HIV Status						
Positive (ref)	53(56.99)	40(43.01)				
Negative	151(95.32)	9(4.68)	0.22(0.065-0.746)*	0.015	0.11(0.022-0.608)*	0.011*
Birth Attendant						
Midwife (ref)	146(85.88)	24(14.12)				
Obstetrician/gynaecologist	64 (77.11)	19(22.89)	0.09(0.026-0.291)*	0.000	0.07(0.018-0.279)	0.000*

Table 7. Predictors of mistreatment during childbirth (logistic regression analysis). *p < 0.05

for potential confounders, husband's income, HIV status and type of birth attendant during childbirth independently predicted mistreatment. Specifically, the odds of being mistreated were significantly lower for HIV negative women compared to HIV positive women (cOR: 0.22; 95% CI = 0.065–0.746; p = 0.015). This relationship was still statistically significant after potential confounders were adjusted for (aOR: 0.11; 95% CI = 0.022–0.608; p = 0.011). Women whose births were attended by obstetricians/gyneacologists were also significantly less likely to report mistreatment compared to those whose birth were attended by midwives (cOR: 0.09; 95% CI = 0.026–0.291; p < 0.01). This relationship was still strongly statistically significant after other factors were adjusted for (aOR: 0.07; 95% CI = 0.018–0.279; p < 0.01). Also, as a woman's husband's monthly income increases, the odds of the woman reporting mistreatment reduces, although the relationship was generally very weak.

4. Discussion

This study is among the first in Ghana to quantitatively estimate the prevalence of mistreatment of women during health facility-based childbirth and associated factors. Findings suggest that, the overall prevalence of mistreatment of women during their most recent childbirth in the Tema General Hospital was high (83%), with most of the mothers experiencing detention (43.1%) due to lack of fee payment, non-confidential care (39.5%), neglect/abandonment (31.8%), verbal abuse (25.3%), discrimination (21.3%), physical abuse (14.2%), and non-consented care (13.3%). Many women also experienced multiple forms of mistreatment. The main factors that significantly predicted mistreatment were being HIV positive, being attended by a midwife rather than an obstetrician/gyneacologist, and a woman's husband earning lower monthly income.

A number of our findings above deserves further commentary. Compared to other previous studies in Africa [8, 9], the 83% prevalence of mistreatment in this study is relatively high. It is however not surprising as evidence from a recent systematic review suggests that mistreatment is increasing in many low-income settings especially in urban areas [13]. With increasing population in many urban areas in SSA amid declining human and financial resources for health as well as deteriorating health infrastructure, there are suggestions that congestion in maternity wards, under-staffing, and over working of health staff, may be compromising quality of maternity care, including mistreatment of women during childbirth [21, 24–26]. It is also possible that mistreatment may not be increasing per se; just that many urban women are becoming increasingly aware of their rights as patients partly because of improvements in formal education. This is more likely in the present study given that the majority of women had some formal education. Be that as it may, the relatively high prevalence of mistreatment in this study is a cause for concern. Mistreatment of women in health facilities during childbirth does not only violate the rights of women to respectful care, but can also threaten women's rights to life, health, bodily integrity, and freedom from institutional violence [5]. Thus, not only is mistreatment a public health issue but it also becomes a human rights and an equity issue [10]. As a number of studies have shown, women who experience mistreatment from midwives or other maternity care providers in a health facility setting are often less likely

to go to a health facility again in subsequent childbirth [4, 11, 12]. This suggests a need for interventions to raise awareness among maternity care providers about the potential adverse effect mistreatment of women could have on utilisation of skilled birth services in the future, and the need to treat women with respect and dignity during childbirth.

This study also indicated that 43% of women who were detained after delivery were as a result of non-payment of medical bills. This is an important factor especially in SSA where women are not as economically empowered as men, and one would therefore expect to find many women with very low monthly income. This seems to be the case in this study where women appeared to earn far lower monthly incomes than their husbands, and where husbands' monthly income was a significant determinant of mistreatment. Indeed, in an Ethiopian study, women with higher monthly incomes were less likely to experience mistreatment as compared to those with a lower monthly income [7]. In countries that still have a user-fee system, poor women may be detained in hospitals after delivery for failure to pay the required bills. A recent study in Ghana indicated that 22% of the women in the sample were detained in health facilities after delivery for nonpayment of fees [9]. Our finding in relation to the relatively high detention rate of women after birth is however surprising given that Ghana has since 2005 implemented a user-fee exemption policy for skilled delivery services. It could be the case that there are other informal charges not covered under the user-fee exemption policy. This is more likely given that previous research in Ghana has reported the existence of informal charges in many health facilities despite the existence of the NHIS and the user-fee exemption policy for delivery services. Our findings here would suggest a need to relook at the user-fee exemption policy for maternal healthcare services to ensure that services are truly free for women. Also, ensuring timely enrolment of all pregnant women on the NHIS through the user-fee exemption policy could lessen the financial burden mothers and families may go through during childbirth.

Again, non-consented care (no informed consent before procedures), non-confidential care, performing vaginal examination in the presence of other people, including patients, as well as disclosure of medical history without consent were other forms of mistreatment mothers went through during delivery. These findings could be due to under-staffing, lack of resources and smaller size of the labour ward and delivery rooms in the hospital. The findings here imply that, expanding the staffing numbers and labour ward and partitioning the rooms with low-cost curtains may have a great bearing on ensuring privacy and respectful maternity care.

Another important finding relates to the fact that women who were HIV positive were more likely to report being mistreated compared to those who were HIV negative. This is not so surprising given that HIV/AIDS is still largely a highly moralising and stigmatising disease in many contexts in Africa. Our result here however does suggest a need for maternity care providers to be less judgmental and discriminatory when dealing with HIV positive mothers. Rather, compassionate and dignified care needs to be emphasised in the care delivery process.

Finally, women whose births were attended by obstetricians/gyneacologists were also significantly less likely to report mistreatment compared to those whose births were attended by midwives. Given that majority of births in this study, and indeed in most parts of Ghana

and SSA are attended by midwives, our finding here is very concerning. Lack of cultural competency, limited training on patient-centred care as well as low staffing numbers and work overload among midwives are possible factors that could contribute to midwives inadvertently mistreating women during childbirth. This would again suggest a need to further strengthen the core training curriculum of midwives to emphasise patient-centred care and interpersonal communication and relationships in addition to increasing the staffing numbers and expanding infrastructure to enhance the interaction between midwives and women during childbirth. Regular on-the-job training of midwives to improve the cultural competency skills alongside improved supervision and greater accountability in the labour wards could all help lessen mistreatment.

Although findings from this study would provide useful information that could guide policy and practice to reduce mistreatment of women in health facilities during childbirth, the study has some limitations. A major limitation is the cross-sectional retrospective survey design that was used, which did not offer opportunities for observational and longitudinal analysis to be done. Observing the interactions between women and maternity care givers would particularly have provided important nuances and as well introduce validation mechanisms into the data collection process. Also, there could be recall bias as respondents were made to recall events that happened in the past 6 months prior to this study. These limitations aside, we believe important lessons could be learnt from our study. Also, our findings could form the basis for a large-scale, more elaborate study using both qualitative and quantitative methods along with health facility audits, to determine the scale of mistreatment of women during childbirth in both urban and rural health facility contexts, and the drivers of mistreatment.

5. Conclusion

This study aimed to examine the prevalence of mistreatment of women during childbirth in health facilities in Ghana, and the factors associated with such mistreatment. Results revealed the prevalence (83%) of mistreatment of women during childbirth in the Tema General Hospital to be high. The specific types of mistreatments varied from woman to woman, but the most prevalent forms were detention, physical mistreatment (hitting, slapping, pinching, legs held and forced apart), and verbal abuse (shouted at, insulted, and reprimanded). A number of factors have been identified to be statistically related to mistreatment, including husbands' monthly income, being HIV positive, and being attended in childbirth by a midwife as against an obstetrician/gynaecologist.

Taken together, the results and discussions in this study add to a growing body of evidence across Africa including in Nigeria [1], Tunisia [2], Ethiopia [7, 20, 25], Kenya [8, 24], and Guinea [21] that suggests mistreatment of women during childbirth as an important public health and human rights issue. Our study, together with evidence from previous research within Africa, gives an indication of the factors that may be contributing to mistreatment of women during childbirth. We think the widespread nature of the phenomena of mistreatment of women

thus far in many countries in Africa has clear implications for midwifery and future research. First, we think our findings provide a basis for large-scale further quantitative and qualitative studies in different contexts in Ghana and in other African countries to estimate the prevalence and forms of mistreatment of women during childbirth, identify important determinants, and explore detailed contextual, structural and personal level explanatory factors as well as relevant remedial policy options and interventions. Second, and beyond this proposed research agenda, we think the time has come for this evidence to be taken up more seriously not just by individual countries like Ghana or health facilities like the Tema General Hospital, but also by midwifery training institutions and professional bodies in different African countries such as the Ghana College of Nurses and Midwives and the West African College of Nurses and Midwives. In addition to a need for critical self-reflection and professional re-orientation of the practice of contemporary nursing and midwifery care within these training institutions and professional organisations to uphold human rights and patient dignity, there should also be professional ethics training for midwives as part of both the core curriculum for training midwives and routine in-service or on-the-job training. This training could also include patient-centred care and interpersonal communication and relationships building.

Given that women who experience mistreatments from healthcare providers are less likely to go to the health facility again during future pregnancy and childbirth, our results also have specific practical implications for the Ghana Health Service more generally, and the Tema General Hospital more specifically. It is important that interventions are put in place to train service providers in patient-centred care and interpersonal communication and relationships so as to minimise mistreatment. Specifically, the Tema General Hospital, together with the Ghana Health Service (GHS), and the Ministry of Health (MoH) should strengthen education of both patients and healthcare providers on patients' rights and responsibilities under the Patients' Charter, and to establish reporting mechanisms in the hospital so that women who suffer unjust mistreatments during childbirth could feel free to report and be responded to appropriately. A sanctions regime, including temporary suspension and total dismissal from work, should also be considered in this regard to deter healthcare providers who unjustifiably mistreat women. Before the above recommendations are implemented however, we recommend expansion in health infrastructure especially in urban areas as well as increasing the human resource base especially the number of midwives so as to reduce work overload and overwork. Finally, there is a need for both public and private sector health facilities that provide maternity care to women to liaise with the GHS and the MoH to ensure that the free maternal health benefit package under the NHIS is comprehensive and covers all women in order to eliminate all informal payments. Also, sanctions should be meted out to healthcare providers who charge unofficial fees. This could help reduce the phenomenon of maternity detention after birth, which contributes to mistreatment.

Acknowledgements

Conflict of interest

The authors declare that they have no conflict of interest.

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