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Factors associated with Disrespect and Abuse of Women during Delivery in Abia State, Southeast Nigeria

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Abstract

Background: Disrespect and abuse are often multi-factorial and may be perceived differently depending on the setting. This study aimed to identify the factors associated with disrespect and abuse experienced by recently delivered women in Abia State, Nigeria.

Method: This was a cross-sectional study conducted in two purposively selected urban and rural healthcare facilities in Abia State, Nigeria. A total of 312 women of child bearing age recently delivered in the facilities were recruited for the study. A pretested semi-structured validated and adapted interviewer-administered questionnaire was used to collect the data by trained research assistants. Data were entered into Microsoft office Excel 2015 database, and subsequently exported to SPSS statistical software for analyses. Association between disrespect and abuse and some sociodemographic variables was assessed using Chi square test of significance and multivariate analysis. The dependent variables were disrespect and abuse. A p-value of <0.05 was considered statistically significant at 95% confidence interval.

Result: Marital status, educational status, level of income and place of residence were found to be statistically significantly associated with disrespect and abuse. Marital status (OR = 9.15 {1.09-77.11}), educational attainment (OR = 1.80 {1.02-3.15}) and sex of main attending healthcare worker (OR = 1.92 {1.11-3.29}) were identified as predictors of disrespect and abuse in both facilities.

Conclusion: The factors influencing disrespectful and abusive behavior from the study suggest multifaceted factors that require multifaceted approach to mitigating disrespect and abuse.

Keywords: Disrespect, abuse, women, associated factors, predictors, FMC Umuahia, Christian Hospital Nlagu, Abia State

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Introduction

There is a growing concern and evidence that disrespect and abuse during facility-based childbirth is prevalent globally and a barrier to achieving good maternal health outcomes.[1,2] Disrespect and abuse (D&A) has been defined as "any form of inhumane treatment or uncaring behaviour toward a woman during labour and delivery".[3,4] Disrespect and abuse is a fundamental violation of women's human rights,[5] and evidence is mounting that disrespect and abuse may undermine women's trust in the health system and deter them from seeking facility-based care for delivery.[6,7] Disrespect and abuse is often multi-factorial and may be perceived differently depending on the setting. However, many stakeholders especially maternal health experts, agree that disrespectful and abusive facility-based treatment during childbirth could be discomforting for women and therefore act as important barriers to women choosing to access skilled care.[8] Respectful care is a critical component to improve maternal health. Any mistreatment of women during childbirth in health facilities can occur at the level of interaction between the woman and provider, as well as through systemic failures at the health facility and health system levels.[9,10] The specific provider behaviours that may constitute disrespect and abuse include such humiliating acts as slapping or scolding of women during childbirth and other systemic deficiencies such as overcrowded and understaffed maternity wards, women delivering on the floor unattended to and in unhygienic conditions.[9]

Various forms of disrespect and abuse are so common among perpetrators or so expected by patients as to be acceptable in the health system. Whereas the expectations of women in labour from their care providers include empathy, support, confidentiality, and respect.[8] Unfortunately, many women, especially those in low-income countries, seeking childbirth services, receive various forms of disrespectful and abusive care from their birth attendants be it subtle or overt.[11–13] Many of the women experienced trauma that required therapy or changed the course of their reproductive lives.[14] Furthermore, degrading treatment and loss of dignity and control during birth have been shown to contribute to birth trauma and even postpartum post-traumatic stress disorder.[15] Unfortunately, mothers perceived that their traumatic experiences often were viewed as routine by their healthcare providers.[15] Disrespect and abuse has a worldwide prevalence and cuts across all socio-economic groups. Some studies have recorded prevalence of 15-70%, 78%, and 98% in Tanzania, Ethiopia and Nigeria respectively.[16–18]

There is an evidence that D&A can hinder the attainment of sustainable development goal (SDG) target 3.1, 3.2 and 3.7 as its burden is prevalent in countries with poor maternal and child care indices.[19] Respectful maternity care could be categorized into four: Individual and Community; Provider; Facility; and National Systems[20] Each of these subsystems is complex and also influenced by the systems surrounding it. Apparently, there is relative lack of sufficient studies on disrespect and abuse during facility based childbirth in Nigeria and particularly, Abia State, as shown in a systematic review of several published disrespect and abuse-related literatures.[21] Furthermore, identifying the determining factors responsible for facility-based disrespect and abuse of women during childbirth in our clime will provide an opportunity to develop appropriate interventions and programmes to curb the burden of D&A. There is a need for the problem of disrespect and abuse during childbirth to be concretely defined and the associated factors of the problem assessed[5] in order to mobilize resources and efforts in the area of Respectful Maternal Care (RMC). This study aimed to identify the associated factors and predictors of disrespect and abuse experienced by recently delivered women in Abia State, Nigeria.

Method

Study Design and Setting

This was a cross-sectional study conducted within a 3-month period (March-May 2018), in two purposively selected urban and rural healthcare facilities in Abia State, Nigeria. They are: Federal Medical Centre, Umuahia (FMCU) and Nigerian Christian Hospital (NCH) Nlagu. Federal Medical Centre is tertiary health institution that is located at the centre of Umuahia town, the capital city of Abia state, south-East, Nigeria.
The facility is a 405-bedded tertiary hospital and one of the leading health care providers in South Eastern Nigeria. The facility is centrally located and readily accessible to people from Enugu, Imo, Cross River, Ebonyi, Rivers, Anambra and Akwa Ibom States. The labour ward of the department which conducts a monthly average of over 200 deliveries with 122 postnatal visits, has thirteen nurses. Whereas, the Nigerian Christian Hospital (NCH), a secondary level healthcare centre is situated on about 119 acres of land, at Nlagu, kilometre 18 along Aba-Ikot Ekpene Road, Obingwa Local Government Area in the South Senatorial Zone of Abia State, South Eastern geopolitical zone of Nigeria. The hospital records about 18000 out-patient attendants, 4000 admissions, 5800 antenatal visits and about 2000 surgical operations annually. The obstetrics and gynaecology (O&G) department has one consultant, five senior Medical

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Officers while the labour ward of the department which conducts a monthly average of 67 deliveries with 61 postnatal visits, has sixteen nurses. Both facilities were selected based on their average number of postnatal attendance (183) per month (267). While FMCU serves predominantly urban population, NCH Nlagu serves predominantly rural populations.

Study Design

The study was a quantitative cross-sectional descriptive survey to assess the factors associated with disrespect and abuse of women during delivery among women attending postnatal clinic at Federal Medical Centre (FMC), Umuahia and Nigerian Christian Hospital (NCH), Nlagu

Sample Size Calculation

The formula, ($n = (Z_A)^2pq/d^2$), for the prevalence or proportion in a descriptive study for a qualitative outcome variable was used for sample size estimation of the study.[22] With 'p', the prevalence (98%) of facility-based disrespect and abuse among women giving birth in a previous study in South-eastern Nigeria.[23] The precision, tolerable margin of error or the expected difference was set at 2%. The minimum sample size was 188 per facility. The study lasted for 3 months and the average number of women who attended postnatal clinic in both facilities per month was 183 (122 and 61 for FMCU and NCH, Nlagu respectively), hence a total of 549 (3*183) women formed the sampling frame from which sample was drawn. The final sample size after adjusting for a non-response rate of 10% was 156 per facility, hence, a total of 312 subjects were recruited from both facilities for the study. These subjects were proportionately distributed in the ratio of FMCU:NCH (2:1) based on the postnatal records of the respective facilities, thus giving 208 mothers for FMCU and 104 for NCH Nlagu

Study Population

The study population was women of child bearing age delivered in a health care facility in Abia State, Nigeria. Eligible respondents included all consenting women who were delivered six (6) months or less, in the selected facilities and attending postnatal clinic visit in both facilities within the study period. Women who were too ill or with physical or structural defects that could impair the interview were excluded from the study.

Sampling Technique

The two health facilities were purposively chosen because of their high patient load and high level of utilization by majority of the populace in their catchment areas for specialist and general care and are representative of urban and rural populations. Using the postnatal clinic register of each facility as the sampling frame, the participants were recruited using systematic random sampling technique. Sampling fraction was calculated using (N/n) [where n = sample size; N = sampling population)[24] over three months. Thus, the sample interval was calculated using the formula: duration of study x sample frame/sample size. Hence, 3x122/208 and 3x61/104 for FMC, Umuahia and NCH, Nlagu respectively, thus giving a sampling interval of 2 for both facilities. The average daily clinic attendance was 31 and 16 for FMC Umuahia and NCH Nlagu respectively, and this formed the daily sampling frame for selection of subjects. Therefore, at every postnatal clinic session in each of the selected facility, numbers were assigned to the women in the respective facilities. Thereafter, using the balloting technique, the first respondent was selected within the sampling interval. Subsequently, the successive respondents were selected by continuous addition of the sampling interval until the daily sample size was achieved. This process continued till the required sample size was attained.

Data Collection Tool

Data were collected using semi-structured, interviewer-administered questionnaire which was pre-tested in another urban tertiary health care facility in the state. The questionnaire was validated and adapted from a similar study,[23] and contained mainly categorical answers in three sections, viz: i) sociodemographic variables e.g. age, educational attainment, occupation, income status, residence, tribe and religion etc. ii) Obstetric and maternal health service use history and experience during last childbirth;- use of antenatal care (ANC), parity, duration of stay in the facility, history of complication during labour, sex of main healthcare worker (HCW) during delivery, and number of HCW who attended to the woman during labour and iii) Disrespectful and abusive experiences of the respondents during last delivery. The primary outcome variable was any of the seven (7) forms (and their subsets) of disrespect and abuse comprising of non-consented care, non-confidential care, physical abuse, non-dignified care, discrimination based on specific patient attributes, abandonment of care and detention in facilities (irrespective of the type).[8] By ticking "yes" to any of the questions in the relevant sections of the questionnaire, a woman was deemed to have been disrespected and/or abused. We relied on the participants' self-report. This was validated by removing leading/unclear/socially desirable/recall questions and also ensuring that answers were anonymous and confidential

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Data Collection/Recruitment Procedure
Data were collected by the principal investigator and six (6) trained research assistants (female nursing students) who attended a two-day training session prior to the initiation of the study. The training aimed at ensuring quality control and to properly educate and acquaint the research assistants of the study protocol, data collection tools, and informed consent procedures. The introduction of the study personnel aims and objectives of the study, and why the questionnaire-based approach, and how it works were explained to the women at every postnatal session. Thereafter, the interviewers administered the questionnaires to the participants after obtaining their written consent to participate.

Data Analysis
The collected data were initially entered into Microsoft office Excel, and thereafter data cleaning and coding was done. The data was then imported into the SPSS statistical software for analyses. Univariate analysis was done to determine frequencies and proportions. The association between disrespect and abuse and some sociodemographic variables such as educational level, occupation, tribe and religion was assessed using Chi square and Fishers exact tests of significance. The primary outcome variable was disrespect and abuse (irrespective of the type). This was dichotomized and modelled using log binomial regression analysis. The multivariate analysis was controlled for age, marital status, employment status, parity, and number of antenatal care visits for the index pregnancy. A P-value of <0.05 was considered statistically significant. This was done at 95% confidence interval. Results were presented in appropriate tables.

The Health Research and Ethics Committee of FMC, Umuahia granted the ethical approval, with reference number: FMC/QEH/G.596/Vol 10/270, while administrative approval was obtained from the head of NCH, Nlagu. After due explanation of the survey objective, procedure, risks/benefits, a written informed consent was obtained from each of the participants before being enrolled the study.

Results
Two hundred and eight (208) and one hundred and four (104) women completed the survey out of the two hundred and thirty (230) and one hundred and ten (110) women from FMCU and NCH Nlagu respectively who consented to and were recruited for the survey with a response rate of 90.4% and 94.5% respectively.
The sociodemographic characteristics of the mothers is as displayed in table 1.

Table 1: Socio-Demographic Characteristics of the Mothers

Facility Characteristic	FMCU n=208 (%)	NCH Nlagu n=104 (%)	Total n=312 (%)
Age (in years)			
≤19	0 (0.0)	4 (3.8)	4 (1.3)
20-29	101 (48.6)	42 (40.4)	143 (45.8)
30-39	102 (49.0)	48 (46.2)	150 (48.1)
40+	5 (2.4)	10 (9.6)	15 (4.8)
Mean ±SD	30.3±4.6	30.8±6.2	30.5±5.2
Marital Status			
Married	204 (98.1)	91 (87.5)	295 (94.6)
Unmarried	4 (1.9)	13 (12.5)	17 (5.4)
Religion			
Christianity	206 (99.0)	100 (100.0)	310 (99.4)
Islam	2 (1.0)	0 (0.0)	2 (0.6)
Highest Educational Status Attained			
Primary or less	3 (1.4)	8 (7.7)	11 (3.5)
Secondary	71 (34.1)	65 (62.5)	136 (43.6)
Above Secondary	134 (64.4)	31 (29.8)	165 (52.9)
Occupation			
Employed	166 (79.8)	83 (79.8)	249 (79.8)
Unemployed	42 (20.2)	21 (20.2)	63 (20.2)
Income per Month			
< N18000	55 (26.4)	52 (50.0)	107 (34.3)
≥ N 18000	153 (73.6)	52 (50.0)	205 (65.7)

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Tribe			
Ibo	201 (96.7)	93 (89.4)	294 (94.2)
Others	7 (3.3)	11 (10.6)	18 (5.8)

Majority of the women were aged between 30-39 years (48.0%) and their mean age (SD) was 30.46±5.20 without significant difference in terms of facility location. Almost all (94.6%) the mothers were married and all except 2 (0.6%) were Christians. About half (52.9%) of the women had attained education status above secondary school level. Women resident in the urban area were more educated than those in rural areas (64.4% versus 29.8% of them having acquired degrees above secondary school). Greater majority (79.8%) of the women were employed. Generally, most (65.7%) of the women earned at least minimum wage ≥ N 18000/month. Majority 294 (94.2%) of the women are Ibos while the rest were from other ethnic groups.

Association between Maternal Socio-Demographic Characteristics and Disrespect and Abuse

The result of the analysis relating to the association between maternal socio-demographic characteristics and disrespect and abuse is as demonstrated in the table 2.

Table 2: Association between Maternal Socio-Demographic Characteristics and Disrespectful and Abusive Care during Last Child Birth

Characteristic	**Disrespect and Abuse**		**χ^2**	**P value**
	Yes N=170 (%)	**No N=142 (%)**		
Age (in years)				
≤19	0 (0.0)	4 (100.0)		
20-24	9 (34.6)	17 (65.4)		
25-29	53 (45.3)	64 (54.7)	6.41	0.26
30-34	49 (52.1)	45 (47.9)		
35-39	24 (42.9)	32 (57.1)		
40+	7(46.7)	8 (53.3)		
Mean ±SD	30.92±4.63	30.07±5.62		
Marital Status				
Married	141 (47.8)	154 (52.2)	1.43	0.15
Unmarried	1 (0.0)	16 (100.0)	FT	**<0.01***
Tribe				
Ibo	137 (46.6)	157 (53.4)		
Ibibio	3 (25.0)	9 (75.0)	1.72	0.19
Others –Yoruba, Hausa	2 (33.3)	4 (66.7)	df=1	
Educational status				
None	0 (0.0)	1 (100.0)		
Primary	1 (10.0)	9 (90.0)	13.84	**<0.01***
Secondary	49(36.0)	87(64.0)	df=2	
Tertiary	92(55.8)	73 (44.2)		
Occupation				
Employed	117 (47.0)	132 (53.0)		
Unemployed	25 (39.7)	38 (60.3)	1.08	0.30
Income				
< N18,000	105 (51.2)	100 (48.8)	7.85	**<0.01***
≥N18,000	37 (34.9)	70 (65.4)		
Facility				
Urban	104 (50.0)	104 (50.0)	5.07	**0.02***
Rural	38 (36.5)	66 (63.5)		

*FT- Fischer Exact Test. *Statistically significant*

Table 1 shows association between mothers' socio-demographic characteristics and disrespect and abuse. Marital status (χ^2=11.52, p<0.01), educational status (χ^2=13.84, df=2, p<0.001), income (χ^2=7.85, p<0.01) and place of residence (χ^2=5.02, p=0.02) were found to be statistically significantly associated with disrespect and abuse.

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Predictors of Disrespect and Abuse among the Women

The various predictors of disrespect and abuse were determined using Multivariate logistic regression analysis as shown in the table 3.

Facility **Factor**	**FMCU** **aOR 95%(CI)**	**NCH Nlagu** **aOR 95%(CI)**	**All** **aOR 95%(CI)**
Marital Status			
Not married	3.37 (0.31-37.11)	56412.72 (0.0)	**9.15 (1.09-77.11) ***
Currently married	1	1	1
Educational Status			
≤Secondary	1.75 (0.91-3.39)	1.78 (0.58-5.46)	**1.80 (1.02-3.15) ***
Post-secondary	1	1	1
Income (in Naira N)			
≥18000	**0.19 (0.04-0.98) ***	0 (0.0)	3.63 (0.83-15.79)
<18,000	0.31 (0.06-1.53)	0 (0.0)	2.98 (0.71-12.56)
No income	1	1	1
Number of HCW			
≤4	1.42 (0.79-2.56)	0.48 (0.13-1.84)	1.22 (0.72-2.08)
>4	1	1	1
Sex of main HCW			
Female	1.26 (0.65-2.44)	4.06 (1.48-11.16)	**1.92 (1.11-3.29) ***
Male	1	1	1
Had Complication during Labour			
No	1.36 (0.63-2.95)	7.97 (0.84-75.84)	1.87 (0.93-3.78)
Yes	1	1	1
Duration of Stay after Delivery (days)			
0-3	0.73(0.28-1.92)	0.46 (0.09-2.36)	1.68 (0.76-3.71)
4-6	0.38 (0.12-1.21)	0.78 (0.09-7.17)	2.24 (0.87-5.81)
≥7	1	1	1
Occupation			
Employed	1.52 (0.54-4.30)	1.52 (0.35-6.60)	2.44 (0.65-9.20)
Unemployed	1	1	1
Parity			
Primiparous	3.35 (0.61-18.58)	1.68 (0.26-10.86)	0.37 (0.12-1.15)
Multiparous	1.80 (0.35-9.33)	2.88 (0.54-15.31)	0.52 (0.18-1.48)
Grand multiparous	1	1	1
Age (in years)			
≤35	0.90 (0.40-2.03)	0.93 (0.23-3.70)	0.76 (0.38-49)
>35	1	1	1
Place of Residence			
Urban			1.02 (0.57-1.81)
Rural			1

** Statistically significant*

Multivariate logistic regression was done to determine predictors of disrespect and abuse among the mothers. Among all respondents, marital status, educational attainment and sex of main HCW were identified predictors of disrespect and abuse in both facilities. The unmarried mothers were 9 times at risk of experiencing disrespect and abuse (OR = 9.15 {1.09-77.11}), those who did not have tertiary education were 80% more likely to experience D&A (OR = 1.80 {1.02-3.15}) compared to their counterparts. Similarly, respondents attended female HCW had higher odds of disrespect and abuse. (OR = 1.92 {1.11-3.29}) In FMCU, only income was found to be significantly associated with disrespect and abuse (OR = 0.19 {0.04-0.98}), as those who earned ≥N18000/month were less likely to experience disrespect and abuse. On the other hand, in NCH Nlagu, only sex of main HCW was found to be statistically significantly associated with disrespect and abuse (OR = 4.06 {1.48-11.16}).

Predictors of Various Forms of D&A

Predictors of various forms of disrespect and abuse are as illustrated in the following tables.

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Table 4a: Predictors of Various Forms of D&A

Facility Factor	FMCU OR 95%(CI)	NCH Nlagu OR 95%(CI)	All OR 95%(CI)
Physical Abuse			
Educational Status			
≤Secondary	6.08 (2.48-14.93)	0.73 (0.15-3.56)	**3.44 (1.58-7.49) ***
Post-secondary	1	1	1
Place of Residence			
Urban			**0.38 (0.17-0.88) ***
Rural	.		1
Non-dignified Care			
Marital Status			
Not married	7.13 (0.85-59.77)	7.59 (0.96-59.92)	**4.40 (1.33-14.57) ***
Married	1	1	1
Place of Residence			
Urban			**0.41 (0.19-0.91) ***
Rural			1
Abandonment /Neglect of Care			
Marital Status			
Not married	**9.03 (1.01-80.91) ***	4.24 (0.65-27.75)	**3.44 (1.02-11.62) ***
Married	1	1	1
Educational Status			
≤Secondary	**2.82 (1.27-6.23) ***	3.33 (0.65-16.94)	**2.89 (1.45-5.85) ***
Post-secondary	1	1	1
Number of HCW			
≤4	**2.81 (1.27-6.21) ***	0.89 (0.17-4.58)	2.02 (0.99-4.10)
>4	1	1	1
Sex of main HCW			
Female	1.99 (0.91-4.36)	3.15 (0.76-13.06)	**2.23 (1.14-4.35) ***
Male	1	1	1
Had complication during labour			
No	0.80 (0.29-2.17)	**6.87 (1.26-37.43) ***	1.28 (0.57-2.89)
Yes	1	1	1
Place of residence			
Urban			**0.35 (0.16-0.77) ***
Rural			1

*****Statistically Significant*

Place of residence (OR = 0.38 {1.09-77.11}), and educational attainment (OR = 3.44 {1.58-7.49}) were identified as predictors of physical abuse among the mothers as shown in table 4a. While mothers from urban areas were less likely to experience physical abuse than those in rural areas mothers who had less than tertiary education were thrice more likely to be abused than those with tertiary education. While marital status (OR = 10.93 {1.12-106.46}) and educational status (OR = 6.08 {2.48-14.93}) were identified as predictors of physical abuse in in FMCU, sex of main HCW (OR = 5.74 {1.15-23.71}), occurrence of complication (OR = 9.98 {1.68-59.22}) and duration of stay (OR = 0.05 {0.01-0.39}) were identified as predictors of physical abuse in NCH Nlagu.

Similarly, place of residence (OR = 0.41 {0.19-0.91.11}), and marital status (OR = 4.40 {1.33-14.57}), were identified as the predictors for non-dignified care. Mothers in urban areas were less likely to experience non-dignified care, while the unmarried were 4 times more likely to experienced non-dignified care compared to those that are married. No factor was identified as a significant predictor for non-dignified care in either of the facilities.

The identified predictors for abandonment/neglect of care included: place of residence (OR = 0.35 {0.16-0.77}), marital status (OR = 3.44 {1.02-11.62}), educational attainment (OR = 2.89 {1.45-5.85}) and sex of main HCW (OR = 2. 23 {1.14-4.35}) were generally identified as predictors of abandonment in care. Urban mothers were at lower risk of being

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abandoned in care (OR = 0.35 (0.16-0.77) so also were married mothers; however, those who had less than tertiary education or attended to by female HCW were at increased odd of abandonment in care. Mothers who are not married and those without tertiary education were thrice at risk of experiencing abandonment, while those attended to by female HCW were twice at higher risk of abandonment.

Table 4b: Predictors of Various Forms of D&A

Facility Factor	FMCU OR 95%(CI)	NCH Nlagu OR 95%(CI)	All OR 95%(CI)
Detention in care			
Marital Status			
Married	0 (0.0)	**20.82 (2.46-175.93) ***	**0.09 (0.02-0.36) ***
Not married	1	1	1
Duration of stay following delivery			
0-3	**0.06 (0.01-0.68) ***	**0.07 (0.01-0.75) ***	0.07 (0.02-0.28)
4-6	0.31 (0.03-2.97)	0.23 (0.02-2.57)	0.29 (0.07-1.25)
≥7	1	1	1
Age (in years)			
≤35	0.83 (0.08-8.62)	0.16 (0.02-1.36)	**3.62 (1.12-11.74) ***
>35	1	1	1
Non consented care			
Had complication during labour			
Yes	1.39 (0.53-3.64)	15.26 (2.02-77.14)	**2.73 (1.30-5.73) ***
No	1	1	1
Non-confidential care			
Age (in years)			
≤35	6.78 (0.86-53.37)	2.48 (0.59-10.48)	**3.09 (1.08-8.82) ***
>35	1	1	1
Discrimination Based on Patient's Attribute			
Marital Status			
Not married	0 (0.0)	7.59 (0.96-59.92)	**54.12 (6.49-230.0) ***
Married	1	1	1

******Statistically Significant*

Generally, only marital status (OR = 0.09 {0.02-0.36}), and age (OR = 3.62 {1.12-11.74}), were found to be significantly associated with detention in care as shown in table 4b. Mothers who were not in marital relationship and aged <35 were more likely to have experienced detention in care. However, duration of stay in the facility was identified as a predictor of detention in care in both FMCU (OR=0.06 {0.01-0.68}), and NCH Nlagu (OR= 0.07 {0.01-0.75}), while marital status was also identified as a predictor in NCH Nlagu (OR = 20.82 {2.46-175.93}). Similarly, only marital status (OR = 0.09 {0.02-0.36}), and age (OR = 3.62 {1.12-11.74}), were found to be significantly associated with detention in care.

Having had complication during labour (OR = 2.73{1.30-5.73}) was identified as the only predictor for non-consented care. Mothers who had complications during last childbirth were twice more likely to report non-consented care
Age (OR = 9.15 {1.09-77.11}), was identified as the only predictor for non-confidential care. Mothers aged less than 35 years were thrice more likely to experience non-confidential care than those aged ≥35 years. In FMCU, educational status (OR = 2.75 {1.21-6.26}) and duration of stay following delivery were identified as predictors of non-confidential care, none was found for NCH, Nlagu. Marital status (OR = 54.12 {6.49-230.00}), was identified as the only predictor for discrimination based on patient's attribute. Mothers who were in non-marital relationship were found to be significantly at higher odds of being discriminated against.

Discussion

The study was conducted to identify the factors responsible for disrespect and abuse among the women who were delivered in facilities in Abia State. These factors included unemployment, primiparity, residency, low education status and

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being unmarried. Our findings contrast other studies in Nigeria and Kenya that found no association of any type between disrespect and abuse and maternal age, educational level, marital status.[3,25] Our findings are similar to other Ethiopian studies that found lack of empowerment, education status, low income, rural residence, and weak health system as risk factors for disrespect and abusive treatment of women in labour.[26–28] Younger and primiparous women are more at risk because they are inexperienced in childbirth process, hence are less likely to know the expectations of healthcare providers from them. Therefore, they may not cooperate maximally with healthcare providers, consequently exposing themselves to the risk of disrespect and abuse. This is more probably due to the low esteem and lack of empowerment of this group of women who are commonly and easily intimidated by healthcare providers. Grand multiparous women are subject to abuse because despite being experienced, healthcare workers blame them for exposing themselves to risk of complications of pregnancy and delivery, particularly if they are of low socio-economic status. Grand multigravida are more likely to report because of an increased awareness of perceived optimal care.[29,30] More importantly, they assumed they know it all and have seen it all, hence have delays in seeking timely care intervention and obeying health care prescription.

Detention in care was found to be statistically significantly associated with women aged less than 25 years, unmarried, without tertiary education, earned no income or income <N18,000/month or resident in rural area. This is so because these groups of women are poor and could not afford their medical bills. This finding corroborates with other studies in Ethiopia and India[25,31] that reported that healthcare services are not within the reach of many Nigerians as well as other sub-Saharan families, a situation which militates against the attainment of SDG 3.[32]

Only educational status was found to be significantly associated with abandonment in care. This finding agrees with another Ethiopian study.[33] The less educated women were more likely to experience abandonment in care because healthcare providers look down on this group of women who are timid and ignorant of their fundamental human rights. Hence, their rights are violated because the HCW usually assume that this group of women lack the capacity to challenge HCW on the wrong doing meted at them, nor can they seek redress in law court. Urban (FMCU) mothers were found to be at lower risk of being abandoned in care probably because they are more educationally and economically empowered than their rural (NCH Nlagu) counterparts. Poverty could be the reason for the above findings. Similar findings were documented in other related studies.[34,35] As the results show, mothers who experienced abandonment in care were more likely to be attended to by fewer numbers of HCWs. This finding supports other Nigerian and Indian studies that demonstrated that the health system is such that contributes to disrespect and abuse of women during childbirth by subjecting providers to degrading working conditions.[36,37] In the study facilities, women wait for long hours before they are attended to, there is no promptness of care by providers and they are therefore either neglected or abandoned in care. Sometimes provider's lack of patience to indulge in pleasantries due to heavy work load make the women sometimes perceive this system failure as an inadequacy on the provider's part. A statistically significant association was found between obstetrics factors and detention in care and it showed that increased mean duration of stay of women who experienced detention in care was significantly higher than those who did not have similar experience. This is so because the healthcare providers, who are already stressed due to lack of adequate manpower and now given additional responsibility to cater for and in some instances "guard" those in "detention" transfer their aggression and resort to abusive and disrespectful treatments to these group of women.

Our finding that sex of main HCW attending to the women being identified as predictor of disrespect and abuse agree with similar studies in Kenya and India which indicated that women were significantly more likely to report mistreatment when their provider was a female compared to a male.[28,37] Our study found no statistically significant association between having had complication during the last childbirth and disrespect and abuse**.** In contrast, a strong association was shown to exist between reported maternal and child complications and disrespect and abuse in another study.[38] In the above-mentioned study, women who experienced complications were more likely to have an overall negative perception of the birth process which may predispose them to report disrespect and abuse. However, this explanation cannot suffice in our study. A plausible explanation could be that urban

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women are generally more educated and exposed to more information compared to their rural counterparts, they are less likely to experience physical abuse than those in rural areas who barely know their rights. Similarly, too, mothers who had complications during last child birth were twice more likely to report non-consented care. This could be explained in part that most women who run the risk of complications are those who either presented very late in labour or never attended ANC in the said facility. Hence in a bid to reprimand these women, the healthcare providers treat them in a disrespectful and abusive manner. The results are in agreement with other similar studies.[6,9,39] The mutual self-respect that exists between healthcare providers and the relatively older clients may be the explanation for their being less likely to experience non-confidential care. In addition, this could be attributed to the level of exposure of these mothers who command a reasonable level of respect from the care providers as opined by other studies.[23,34,39] Due to the belief and cultural practices of our society, it was not surprising to note that single mothers were found to be significantly at higher odd of being discriminated against. In our clime, such women are disregarded and treated with contempt when pregnant.[23]

Strength and Limitations

The major strength of this study is that the study is among the first of its kind in this part of the country thereby drawing attention to the body of knowledge to this subject matter. The study sampled both urban and rural women in two centres. This ensured a good representative population of women of child bearing age in the state, and enhances the generalizability of the findings to the general populace. However, some of the limitations include that the study was facility based, and the study was limited to only three months, so we could not ascertain the trends of D&A over the years. The responses were self-reported hence the risk of introducing bias. This was however mitigated by recruiting only women who were recently delivered of their babies. The main snag of this study is that it studied the clients instead of the HCW who is perpetrating the act. It would have been good to collect this data on HCW, find out why they are committing the act and hence draw out plans to mitigate this dangerous deed affecting the much-needed satisfying maternal healthcare delivery.

Conclusion

This study established facility-based disrespect and abuse to mothers during delivery by the healthcare workers. Marital status, educational status, sex of the HCW attending to the woman during labour were the independent predictors of disrespect and abuse in this study. Findings from this study shall be communicated to key stakeholders including providers and administrators at the study facilities to aid in informed decision making in designing intervention programmes. Furthermore, research to measure the magnitude of the effect of respectful care interventions on disrespect and abuse; and a similar study targeting the HCW in these study facilities is recommended.

Declarations

Ethical Consideration: The Health Research and Ethics Committee of FMC, Umuahia granted the ethical approval, with reference number: FMC/QEH/G.596/Vol 10/270, while administrative approval was obtained from the head of NCH, Nlagu. After due explanation of the survey objective, procedure, risks/benefits, a written informed consent was obtained from each of the participants before being enrolled the study.

Authors' Contribution: Kalu U. Kalu conceptualized the study, developed the methodology and results sections and revised the manuscript; Ugochwukwu U. Onyeonoro conducted the literature review, data collection and developed the discussion section; Chidinma I Amuzie analyzed the data and revised the manuscript for intellectual and scientific content; Uche N. Nwamoh conducted data collection and revised the manuscript. All the authors have read and agreed to the final manuscript.

Conflict of interest: The authors declare no conflicting interests.

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