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Postpartum Depression among Postnatal Women as a Result of Disrespect and Abuse during Labour and Delivery

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Abstract

Introduction: Evidence suggests that health care providers habitually fail to provide respectful maternity care during facility-based delivery. This study explored the relationship between disrespect and abuse experienced by women during child birth and postpartum depression.

Methods: This was a cross-sectional study targeting women attending postnatal services within 28 days of delivery preceding the survey. A random sample of 306 women from 20 health facilities were selected and interviewed. Self-reported disrespect and abuse included physical abuse, non-consented care, non-confidential care, verbal abuse, and discrimination based on specific attributes. The Edinburgh Postnatal Depression Scale (EPDS) was used to assess postpartum depression.

Results: Findings reveal that 13% and 12% of the women had mild and severe symptoms of emotional distress respectively. One third (33%) experienced at least one form of disrespect and abuse. Further, the risk of having severe emotional distress symptoms was; (RRR=2.52, 95%CI: 1.256 - 5.057); (RRR=1.90, 90%CI: 0.905 - 3.985); (RRR=2.23, 90%CI: 0.874 - 5.669); (RRR=2.32, 95%CI: 1.146 - 4.692) and (RRR=4.41, 99%CI: 1.769 - 10.980) times higher for women who experienced; Physical abuse; Non-confidential care; Non-dignified care; Abandonment or denial of care; and Detention in facilities respectively. Similarly, the risk of having mild emotional distress was (RRR=2.44, 95%CI: 1.201 - 4.939) and (RRR=2.34, 95%CI: 1.176 - 4.672) times higher for women who experienced; Non-confidential care and Abandonment or denial of care respectively.

Conclusion: Disrespect and abuse during Labour and delivery have potential of crafting adverse health outcomes such as postpartum depression hence negative child birth experiences defile the fundamentals for healthy motherhood.

Recommendation: There is need to address the various forms of disrespect and abuse in order to ensure respectful maternity care and elude the potential adverse outcomes of postpartum depression. Postnatal services should incorporate critical assessment of signs of mental illness among women for early intervention.

Introduction

Facility-based and skilled attendance during child birth are becoming highly recognized as key drivers in the reduction of maternal and infant mortality rates. Though improvement in maternal quality care has been a global health agenda since the initiation of the millennium development goal 5, which focused on improving maternal health, inadequate access to comprehensive obstetric care remains a great challenge for many women globally [1]. In the new 2030 sustainable development goal (SDG) 3, efforts are being directed towards ending preventable maternal mortality by reducing the global maternal mortality ratio (MMR) to fewer than 70 maternal deaths per 100000 live births. This is aimed at saving lives of thousands of women who die due to complication from pregnancy and childbirth through improved obstetric care and expanded universal health coverage. According to the World Health Organization, Sub-Saharan Africa and Southern Asia accounted for about 86% (254000) of the estimated global maternal deaths in 2017, .Despite weighty headway in global coverage of key delivery indicators, most developing countries are still lagging behind regarding access to comprehensive obstetric care. Pivotal to these key delivery indicators is respectful maternity care, which include, prevention and elimination of all forms of disrespect and abuse(D&A) of women during facility-based childbirth, which is critical to reaching sustainable development goal 3 [2]. Further, Respectful maternity care requires the adoption of safe and respectful care practices, health maintenance for all, regardless of the socio-economic status and preservation and support of the physiological process that unfold during pregnancy and birth [2,3]. Nevertheless, in most countries where basic human needs for shelter, food, and high levels of social and health inequalities, the rate of maternal and infant mortality is still very high [3]. Apart from contributing to a high child and maternal mortality rates, evidence also suggest that D&A of women during the process of childbirth constitutes a violation of human rights because women are more vulnerable during the process of child birth [4], which include, violation of a woman's right to confidentiality, right to being free from coercion, right to consent to any medical procedure and right to respectful maternal care [4]. Further, lack of respective maternity care in birth settings creates an environment, which is devoid of support and respect for birthing mothers. Few studies have documented the drivers of disrespect and abuse during facility based deliveries; in their study, Silveira and colleagues noted that disrespect and abuse among women in most facilities are usually driven by the nature of patient -provider relationship in the context of obstetric care , which can be in the form of verbal, physical , sexual abuse , neglect , stigma , lack of privacy and confidentiality and discrimination [3-5], also noted that disrespect and abuse (D&A) can manifest in five forms which include, physical abuse, sexual abuse, verbal abuse, stigma and discrimination. This is also affirmed by Bowser and Hill (2014), who found that non-consensual care, non -confidential care, non-dignified care, abandonment of care, and detention in facilities can be potential forms of disrespect and abuse. In most instances, birthing women are also subjugated to harsh, rude and judgmental language which are a worst form of labor care. However, this form of abuse and disrespect been normalized and underreported by women and health care providers in most contexts in Africa [6], this is due to the fact that it is perceived as an effective way of helping women push and have safe delivery by birthing women and healthcare providers. Bohren and colleagues also found similar results in Nigeria, where this kind of abuse is perceived as an effective way of saving the lives of mother and the baby [5]. Ultimately, the quality of obstetric care provided by providers in most facilities is influenced by quality and nature of the health system which is determined by institutional structures, ethics and inherent processes that dictate the practice of obstetric care among providers. Also, the extent to which women are subjected to disrespect and abuse is very much dependent on the socio-economic status of women, with women from high social class treated fairly more favorable [4,7]. Other drivers of respectful maternal care include, level of education, ethnicity, gender, race and age. Further, Bowser and Hill (2010, noted that highly marginalized groups such as adolescents, unmarried women, women with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome and those from low socioeconomic status are more vulnerable to D&A compared to their counterparts. Despite several literature pointing to the negative impact of D&A on women's health, this has been neglected in most facilities, especially in middle- and low-income countries, where there is poor social support and weak and fragmented health systems [8]. Consequently, fear and anxiety of experiencing disrespect and abuse, influence women's decision not to seek maternal health care at a health facility during labor and delivery. Most often, women would prefer home birth to hospital based maternity facilities due to anxiety and fear of disrespect and abuse. For instance, in a study done in Ethiopia, Siraj and colleagues found that lack of respect and courtesy from providers, perceived poor service quality, fear to expose the body to strangers were found to contribute to low institutional delivery rates [9]. However, unless done with the help of skilled birth attendants, home delivery is a huge public health threat and is associated with high maternal and infant mortality rates [2]. This represents important causes of suffering for most women and are important barriers to women choosing to access skilled health care [10]. Therefore, there is need to address factors arising from poor obstetric care from facility staff and other health workers in the context of increased global maternal and child mortality rates [8]. Few studies have documented the effects of disrespect and abuse on the health of women after delivery [4,11]. In highlighting a link between maternal disrespect and abuse and postpartum depression (PPD), in their population -based cohort study, Silveira and colleague applied a validated Edinburgh Postnatal Depression

Scale (EPDS), to show a link between maternal disrespect and abuse and postpartum depression, findings were that disrespect and abuse during child birth increased the odds of postpartum depression three months after birth. Also, various definitions of postpartum depression have evolved in the past decades. Jones and Coast, defined PPD as a mental and behavioral disorder associated with puerperium starting from six weeks of delivery and lasting for forty days [12], while others have defined postpartum depression as depressive symptoms occurring during the first year of postpartum period which is characterized by low mood, loss of enjoyment, reduced energy and activity and reduced self-esteem [13]. Despite being underdiagnosed and undertreated in most settings, PPD still remains a significant public health problem affecting approximately 13% of women within a year of childbirth [14]. And as Patel and colleagues noted, PPD and mental health are highly neglected subjects, and little attention has been directed towards improving the mental wellbeing of women during the postnatal period [11]. PPD has a potential to last beyond the postpartum period [13,15] and if not addressed, it may result into emotional, psychological, and mental health disruption [16]. Clinical features of PPD include, depressed mood, dwindled pleasure in life activities, insomnia /or hypersomnia, weight loss or weight gain, loss of energy, feeling of worthlessness and excessive guilty, reduced self-esteem and self-confidence and suicidal ideation [17]. Quality maternal care is therefore vital during this period to prevent adverse effects of PPD, not only for the mother's wellbeing but for the wellbeing of the child and community. This is because the maternal health of a woman entails being able to cope with normal stresses and be able to positively contribute towards the community. The distressing effects of PPD on the mother and child usually result in poor health outcomes. Studies have revealed that PPD is associated with poor mother-infant boding, child abuse, child neglect, and maternal substance abuse [4], with babies born to mothers with PPD more likely to be stunted due to delayed lactation. Likewise, mothers with PPD are more likely to suffer from post-traumatic stress disorders (PTSD), low self-esteem and suicidal thoughts [18], and unwillingness to seek health services in the hospital-based facilities [19]. Therefore, understanding predictors of abuse and disrespect and early detection and diagnosis of PPD are key in improving the mental health of women and children. However, this continues to be a challenge in most developing countries, including Zambia. Zambia has made a substantial improvement in enhancing maternal health facility deliveries. This has contributed to the significant reduction in the infant and maternal mortality rates. The infant mortality rate now stands at 51.96/1000 births while the maternal mortality rate is at 189/100000 live births. According to the Zambia Demographic Health survey, about 84% deliveries are facility based, while 16% are home delivered. Recently, concerted efforts have been aimed at enhancing capacity building and strengthening institutional capacity in order to improve maternal and child care .Overall, one of the objectives of the NHSP 2017-2021 has been to reduce Maternal Mortality Ratio (MMR) from 398/100000 live births in 2014 to 100/100,000 live births by 2021 [20]. Health system strengthening and capacity building that ensure respectful obstetric care, which is devoid of abuse of women during child birth has been the government top agenda. This is being done by prioritising institutional deliveries, which is pivotal in reducing maternal and infant mortality rates [2]. Despite existing national strategies aimed at enhancing access to institutional deliveries, recent evidence in Zambia suggest that maternal health care providers habitually fail to provide respective care during facility-based delivery. For instance, a study by Nyirenda and colleagues done in Ndola and Kitwe revealed that most maternal health care providers did not adhere to the rights of child bearing women [20]. Further, a qualitative study done to understand the behavioral drivers of disrespectful and abuse during labor and delivery, found that client experience of disrespectful care by providers during labor and delivery in Chipata, Zambia is still prevalent. As above, several studies have documented that disrespect and abuse is a growing concern in different countries and contexts. However, very few studies have assessed the consequences of such experiences on the health mothers and children. To our knowledge, no study has assessed Postpartum Depression (PPD) as a consequence of maternal disrespect and abuse during facility deliveries in Zambia. Therefore, this study was aimed at assessing the association between postpartum depression and disrespect and abuse during facility deliveries in Ndola and Kitwe districts of the Copper belt Province. The study may act as a backdrop to many interventions aimed at promoting respectful maternal care and improving the mental wellbeing of women in the prenatal and postnatal periods.

Methodology

Study design and participants

This was a cross-sectional study assessing the experiences of postnatal women during labour and delivery and also assessed their mental well-being in the last 7 days preceding the assessment. The study was conducted in the Copperbelt Province of Zambia specifically in Ndola and Kitwe districts. The target population for the study were women attending postnatal services and had a live birth within 28 days of delivery. A random sample of 20 health facilities in Ndola and Kitwe was selected. A total of 306 women who had a live birth within 28 days preceding the assessment were selected as they visited the health facility to access postnatal services. Face to face interviews were conducted with mothers using a structured interview questionnaire

After receiving postnatal service from the sampled health facilities.

Measurements

1. Socio-economic and demographic characteristics

The assessment collected women's socio-economic and demographic characteristics such as; age, marital status, education

(based on last grade/school attended), occupation (formal or informal), residence (High, medium and low density), religion (protestant/ catholic or other religions) and city.

2. Disrespect and abuse of women during childbirth

Based on the seven (7) universal rights of childbearing women, women expressed their experiences during labour and delivery using the Performance Standards for Respectful Maternity Care developed by the United States Agency for International Development (USAID) and Maternal and Child Health Integrated Program (MCHIP) [21]. Disrespect and abuse were classified under the seven rights as follows: Physical abuse, Non-consented care, Non-confidential care, Non-dignified care (including verbal abuse), Discrimination based on specific attributes, Abandonment or denial of care and Detention in facilities and were a composite of the operational definitions in Table 1.

Classification of Disrespect and Abuse	Corresponding right	Operational definition; Experiences of Disrespect and abuse
Physical abuse	Freedom from harm and ill treatment	Provider used: physical force or abrasive behavior; physically restrain you; touch or demonstrate caring in a culturally appropriate way; separate you from your baby unless medically necessary; deny you food or fluid in labour unless medically necessary
Non-consented care	Right to information, informed consent and refusal, and respect for choices and preferences, including companionship during maternity care	Provider: introduced themselves; provided information throughout labour and birth; encourage you to ask questions; respond to your questions with promptness, politeness and truthfulness; obtain consent prior to any procedure; allowed to move about during labour and assume position of choice during birth
Non-confidential care	Confidentiality, privacy	Files/information kept confidential; curtains or other visual barrier to protect you during exams, birth or procedures
Non-dignified care (including verbal abuse)	Dignity, respect	Provider; spoke politely; insult, intimidate, threaten or coerce you
Discrimination based on specific attributes	Equality, freedom from discrimination, equitable care	Provider; spoke in a language at a level that you understand; showed disrespect to you based on any specific attribute
Abandonment or denial of care	Right to timely healthcare and to the highest attainable level of health	Provider encourage you to call him/her if she needed her service at any point/Providers responded in a timely way any time you called for help/ Left alone or unattended to
Detention in facilities	Liberty, autonomy, self-determination, and freedom from coercion	Stopped from leaving the facility because of failure to pay for a service/ detained and stopped from leaving the facility when so wished

Table 1: Disrespect and abuse measurement and operational definition.

Postpartum depression

The Edinburgh Postnatal Depression Scale (EPDS) is a 10 item self-report measure (based on series of questions) designed to screen women for symptoms of emotional distress during pregnancy and the postnatal period. The EPDS scale contains ten (10) questions and each question has responses rated on a 4-point Likert scale (0–3) assessing common depressive symptoms experienced in the last seven (7) days. A score of zero (0) indicates no sign of distress while a score of three (3) indicates the severe signs of distress. Based on the EPDS criteria, a composite variable of emotional distress was generated by summing all the ten (10) questions and further categorized as follows; Scores in the range 0-9 indicate normal; scores in the range 10-12 indicate mild symptoms of emotional distress and scores of 13 and above indicate severe symptoms of emotional distress. The higher the score, the higher the risk and severity of emotional distress [22].

Statistical Analysis

The data was analyzed using Stata version 14. Univariate analysis were conducted to provide descriptive statistics of socio-economic and demographic characteristics of study participants; status of disrespect and abuse as well as the status of postpartum depression among study participants. Chi-square analysis was performed to assess associations between independent variables (disrespect

and abuse) and the dependent variables (Emotional Distress). Multinomial Logistic regression was conducted to measure the relationship between disrespect, abuse and emotional distress.

Ethical Considerations

Ethical clearance was sought from Tropical Disease Research Center to conduct the study. Approval to conduct the study was also sought from National Health Research Authority. Permission to visit health facilities was sought from Ministry of Health. Training: All research assistants underwent extensive training to equip them with knowledge, skills and the ethics to uphold during the assessment. All the data collected during the assessment was kept confidential at Amref Zambia offices.

Participant's information: All potential participants were informed about the assessment through a comprehensive information participant's sheet that was read to the participants. Potential participants were thus informed about the objectives of the study and that participation in the assessment was voluntary. Potential participants were also informed that they were at liberty not to answer questions they did not wish to and they could withdraw from the study at any time if they so wished. Participants were assured that the information they provided was confidential and none of their names would be collected. Besides informing the potential participants about the study, obtaining consent and conducting the interviews, research assistants were trained to always treat participants with the utmost respect, dignity and freedom during the interview. Participants did not receive any financial or other material benefits for participating in the assessment. Consent and assent: Consent to take part in the study was only sought after informing the potential participants about all facets of the study and all questions about the study were addressed. For adolescent women below the legal age (below 18 years), consent was sought from parents' / guardians' / caregivers/ spouse before assent sought from the potential participant. Therefore, participants who consented and assent to take part in the study were required to sign or thumb print the consent forms.

Results

Background characteristics of participants

Table 2 presents background findings of participants in Ndola and Kitwe districts of the Copperbelt. One third (32.7%) of the participants were aged 25-29, 26.5 percent were aged 25-29 and 14.4 percent were aged 15-19. The majority (83.4%) of the respondents were married and two thirds (66.7%) had attained secondary education. More than half (59.8%) of the respondents were not working (housewife) and 1 in 10 were in informal employment. The results further show that over three quarters (83.3%) of the respondents were from a high-density area, two thirds (63.1%) were protestants and about half (51%) were in Kitwe.

Characteristic	%	Sample size
Age		
15-19	14.4	44
20-24	32.7	100
25-29	26.5	81
30-34	17	52
35-39	8.2	25
40-44	1.3	4
Total	100	306
Marital status		
Single	13.7	42
Married	84.3	258
Divorced	0.7	2
Widow	0.3	1
Separated	0.7	2
Cohabiting	0.3	1
Total	100	306
Education status (last grade attended)		
No Education	1.6	5
Primary	26.1	80
Secondary	66.7	204
Tertiary	5.6	17
Total	100	306
Occupation		
Formal Employment (Teacher, nurse etc)	1	31
Informal Employment (Business, farmer, etc)	30.1	92
Not working (housewife etc)	59.8	183
Total	100	306
Residence		
Low density	2.3	7
Medium density	14.4	44
High density	83.3	255
Total	100	306
Religion/denomination		
Catholic	36.6	112
Protestant	63.1	193
Muslim	0.3	1
Total	100	306
City / Town		
Kitwe	51.3	157
Ndola	48.7	149
Total	100	306

Table 2: Percentage distribution of participant's characteristics.

Disrespect and abuse

Findings in Table 3 show that; 35.9% of the women experienced physical abuse as their right to freedom from harm

and ill treatment was violated; almost all (99%) experiences non-consented care indicating lack of enjoyment of the right to information, informed consent and refusal, and respect for choices and preferences, including companionship during maternity care; a quarter (25.5%) experienced non-confidential care thereby violating their right to confidentiality and privacy; 11.1% experienced non-dignified care including verbal abuse hence their right to dignity and respect was not upheld; 18.6% of the women were Discrimination based on specific attributes thereby violating their right to equality, freedom from discrimination, equitable care; 30.7% of the women had experiences of abandonment and denial of care hence their right to timely healthcare and to the highest attainable level of health was desecrated; and 9.5% of the women experience detention in health facilities against their will leading women being unable to enjoy the right to liberty, autonomy, self-determination, and freedom from coercion.

Disrespect and Abuse	Corresponding Right	Indicator	%	Sample size
Physical abuse	Freedom from harm and ill treatment	No	64.1	196
		Yes	35.9	110
		Total	100	306
Non-consented care	Right to information, informed consent and refusal, and respect for choices and preferences, including companionship during maternity care	No	1	3
Non-confidential care	Confidentiality, privacy	No	74.5	228
		Yes	25.5	78
		Total	100	306
Non-dignified care (including verbal abuse)	Dignity, respect	No	88.9	272
		Yes	11.1	34
Discrimination based on specific attributes	Equality, freedom from discrimination, equitable care	No	81.4	249
		Yes	18.6	57
Abandonment or denial of care	Right to timely healthcare and to the highest attainable level of health	No	69.3	212
Detention in facilities	Liberty, autonomy, self-determination, and freedom from coercion	No	90.5	277
Disrespect and Abuse	Average	32.9		

Table 3: Percentage distribution of disrespect and abuse.

Postpartum depression

Table 4 shows that the most notable symptoms of severe emotional distress were; complete feeling of unnecessary blame whenever things went wrong (6.2%); things getting on top of her head (5.9%); being so unhappy that she could not sleep (6.5%) and feeling sad or miserable (5.6%). The least reported symptoms of emotional distress were; thoughts of harming oneself (1.6%); and not looking forward to things with enjoyment (2.3%). Therefore, Findings reveal that a quarter of the postnatal women had mild (13%) and severe symptoms of emotional distress (12%) within seven (7) days preceding the survey.

Postnatal Depression scale	%	Sample size
Have you been able to laugh and see the funny side of things:		
As much as I always could	77.1	236
Not quite as much now	16	49
Definitely not so much now	3.3	10
Not at all	3.6	11
Total	100	306
Have you looked forward with enjoyment to things:		
As much as I ever did	78.4	240

Rather less than I used to	12.1	37
Definitely less than I used to	7.2	22
Hardly at all	2.3	7
Total	100	306
Have you blamed yourself unnecessarily when things went wrong:		
No, never	56.5	173
Not very often	15.4	47
Yes, some of the time	21.9	67
Yes, most of the time	6.2	19
Total	100	306
Have you been anxious or worried for no good reason:		
No, not at all	63.1	193
Hardly ever	9.5	29
Yes, sometimes	24.2	74
Yes, very often	3.3	10
Total	100	306
Have you felt scared or panicky for no good reason:		
No, not at all	60.1	184
No, not much	16	49
Yes, sometimes	19	58
Yes, quite a lot	4.9	15
Total	100	306
Have things been getting on top of you:		
No, I have been coping as well as ever	42.5	130
No, most of the time I have coped quite well	29.4	90
Yes, sometimes I haven't been coping as well as usual	22.2	68
Yes, most of the time I haven't been able to cope at all	5.9	18
Total	100	306
Have you been so unhappy that you have had difficulty sleeping:		
No, not at all	65.7	201
Not very often	14.4	44
Yes, sometimes	13.4	41
Yes, most of the time	6.5	20
Total	100	306
Have you felt sad or miserable:		
No, not at all	60.1	184
Not very often	23.5	72
Yes, quite often	10.8	33
Yes, most of the time	5.6	17
Total	100	306
Have you been so unhappy that you have been crying:		
No, never	69.9	214
Only occasionally	17.6	54
Yes, quite often	7.5	23
Yes, most of the time	4.9	15
Total	100	306
Have you thought of harming yourself:		
Never	88.6	271

Hardly ever	5.2	16
Sometimes	4.6	14
Yes, quite often	1.6	5
Total	100	306
Postpartum depression		
Normal	74.5	228
Mild	13.1	40
Severe	12.4	38
Total	100	306

Table 4: Edinburgh Postnatal Depression Scale/indicators.

Chi-square analysis: Link between disrespect, abuse and postpartum depression.

The chi-square test of independence shows that there was a statistical significant association between depression and a women who experienced; physical abuse (p=0.029); non-confidential care (p=0.019); abandonment of care (p=0.007) and being detained at the facility (p=0.003) during labour and delivery at the health facility. Therefore, findings reveal that over half (55%) of women with severe symptoms of emotional distress were physically abused; about one third (34.2%) of women who had severe symptoms of emotional distress had non-consented care from health healthcare providers; 44.7% of women who had severe symptoms of emotional distress had been abandoned or denied care; and among women with severe emotional distress symptoms, about a quarter (23.7%) were detained at the facility (Table 5).

Postpartum Depression					
Normal %		Mild %	Severe %	Total %	Sample size n
Physical abuse					
No	67.1	65	44.7	64.1	196
Yes	32.9	35	55.3	35.9	110
Total	100	100	100	100	306
Pearson chi2(2) = 7.0958 P-value= 0.029					
Non-consented care					
No	0.4	2.5	2.6	1	3
Yes	99.6	97.5	97.4	99	303
Total	100	100	100	100	306
Pearson chi2(2) = 2.7081 P-value= 0.258					
Non-confidential care					
No	78.5	60	65.8	74.5	228
Yes	21.5	40	34.2	25.5	78
Total	100	100	100	100	306
Pearson chi2(2) = 7.8752 P-value= 0.019					
Non-dignified care (including verbal abuse)					
No	90.8	85	81.6	88.9	272
Yes	9.2	15	18.4	11.1	34
Total	100	100	100	100	306
Pearson chi2(2) = 3.5023 P-value= 0.174					
Discrimination based on specific attributes					
No	82.5	77.5	78.9	81.4	249

Yes	17.5	22.5	21.1	18.6	57
Total	100	100	100	100	306
Pearson chi2(2) = 0.7198 P-value= 0.698					
Abandonment or denial of care					
No	74.1	55	55.3	69.3	212
Yes	25.9	45	44.7	30.7	94
Total	100	100	100	100	306
Pearson chi2(2) = 9.8532 P-value= 0.007					
Detention in facilities					
No	93.4	87.5	76.3	90.5	277
Yes	6.6	12.5	23.7	9.5	29
Total	100	100	100	100	306
Pearson chi2(2) = 11.5988 P-value= 0.003					

Table 5: Association between disrespect, abuse and postpartum depression.

Multinomial logistics regression analysis: Relationship between disrespect, abuse and postpartum depression. A multinomial logistic regression was conducted to predict a nominal dependent variable (emotional distress) given disrespect and abuse as independent variables. after controlling for predictor variables, findings show in table 6 that the risk of having mild emotional distress symptoms versus having normal symptoms was (RRR=2.44, 95%CI: 1.201 - 4.939) and (RRR=2.34, 95%CI: 1.176 - 4.672) times higher for women whose rights to confidential care, privacy (Non-confidential care) as well as right to timely healthcare and the highest attainable level of health (Abandonment or denial of care) was violated respectively.

Similarly, the risk of having severe emotional distress symptoms versus having normal symptoms was; (RRR=2.52, 95%CI: 1.256 - 5.057); (RRR=1.90, 90%CI: 0.905 - 3.985); (RRR=2.23, 90%CI: 0.874 - 5.669); (RRR=2.32, 95%CI: 1.146 - 4.692) and (RRR=4.41, 99%CI: 1.769 - 10.980) times higher for women whose rights to; freedom from harm and ill treatment (Physical abuse); confidentiality and privacy (Non-confidential care); dignity and respect (Non-dignified care); timely healthcare and the highest attainable level of health (Abandonment or denial of care); and liberty, autonomy, self-determination, and freedom from coercion (Detention in facilities) was violated respectively (Table 6).

Postpartum depression		**RRR**	**P-value**	**Conf. Interval**
Normal (base outcome)				
Mild	No (RC)	1		
Physical abuse	Yes	1.1	0.794	(0.542 - 2.225)
Non-consented care	Yes	0.17	0.216	(0.011 - 2.804)
Non-confidential care	Yes	2.44**	0.014	(1.201 - 4.939)
Non-dignified care (including verbal abuse)	Yes	1.74	0.267	(0.655 - 4.621)
Discrimination based on specific attributes	Yes	1.36	0.456	(0.603 - 3.088)
Abandonment or denial of care	Yes	2.34**	0.016	(1.176 - 4.672)
Detention in facilities	Yes	2.03	0.197	(0.693 - 5.934)
Severe	No (RC)	1		
Physical abuse	Yes	2.52***	0.009	(1.256 - 5.057)
Non-consented care	Yes	0.16	0.203	(0.010 - 2.663)
Non-confidential care	Yes	1.90*	0.09	(0.905 - 3.985)
Non-dignified care (including verbal abuse)	Yes	2.23*	0.093	(0.874 - 5.669)

Discrimination based on specific attributes	Yes	1.25	0.603	(0.535 - 2.936)
Abandonment or denial of care	Yes	2.32**	0.019	(1.146 - 4.692)
Detention in facilities	Yes	4.41***	0.001	(1.769 - 10.980)
Confidence Interval in parentheses. RRR (Relative Risk Ratio) *** p<0.01, ** p<0.05, * p<0.1				

Table 6: Relationship between disrespect, abuse and postpartum depression.

Discussion

This study assessed the association between postpartum depression and disrespect and abuse of women during facility childbirth. Our findings revealed that almost all women experienced some form of disrespect and abuse during child birth. The findings are in congruence with a study done in Kenya which revealed mistreatment of female patients during child birth [6]. The study revealed that verbal abuse, physical abuse, failure to meet professional standards, poor rapport between health workers and women, with least being stigma and discrimination were the most common form of disrespect and abuse. This study found that women experienced non-consented care an indication of failure to adhere to clinical practice which is in line with findings by Oluochi-Aridi and colleagues who found that failure to meet professional standards at work was the most common form of abuse experienced by the women. As with other studies worldwide [6-8]. poor professional standards which is a form of institutional violence has been known to be a determinant of postpartum depression, in many countries, this is as a result of weak and fragmented health system with poor policy support [7]. Similar results have also been found elsewhere [1,5,23]. In our study, women experienced physical abuse (such as slaps and pinches). Conversely, higher prevalence of physical abuse has been documented elsewhere [24,25]. However, despite physical abuse being one of the waste form of maternity care violence, it has been normalized and underreported by women in the world especially in developing countries, this is due to the fact that it is often perceived by birthing women and health care providers as an effective way of helping women push and have safe delivery. This coincides with the findings in other studies in Africa [24,25]. Also, in their study, Bohren and colleagues found that in Nigeria, this kind of abuse is perceived as an effective way of saving the lives of mother and the baby [5]. This could be due to the influence of socio-cultural values. Research is therefore needed on how socio-cultural values influence behaviors among birthing women and health care providers. Physical abuse was highly associated with severe symptoms of emotional distress (EPDS≥13), these findings are similar to a prospective population-based cohort study by Silvera et al, (2019) [4], which revealed increased odds of having postpartum depression among women who experienced physical abuse during childbirth ,(EPDS≥13), (OR 1.58 95%CI 1.06–2.33). The study further revealed that women who did not screen positive for antenatal depression and reported having experienced the greater effect of physical abuse had a higher likelihood of developing both at least moderate and marked to severe postpartum depression. Verbal abuse as a form of institutional violence that can potentially cause postpartum depression among women [4]. This is usually in form of harsh and scolding words, including threats towards birthing women. Literature however suggest that women who are verbally abused during antenatal and prenatal periods, including those who show no symptoms of emotional distress during antenatal are more likely to develop postpartum depression [4,7]. This signify the multiplicative interaction between the different forms of disrespect and abuse experienced in increasing the risk of maternal postpartum depression occurrence [4]. Besides, disrespect and abuse, other independent predictors of postpartum depression have been documented. For instance, ,Shitu and colleagues found that predictors such as unwanted pr egnancy(AOR=1.95,95%CI:1.14-3.33) unwanted infant sex (AOR=1.79,95%CI:1.13-2.86), infant illness,(AOR=2.08,95% CI:1.30-3.34) and low social support (AOR=3.16,95% CI:1.55-6.43), where highly associated with postpartum depression [13]. Interestingly, they found that demographic factors such as, occupation, age, marital status, income level where not significantly associated with postpartum depression. This contrasts with findings from studies done elsewhere [26], which revealed a statistical significant association between socio demographic factors such as age, occupation, marital status, and education level. Further, Souza and colleagues found positive interactions between violence by negligence by health care professionals and race and age as determinants of postpartum depression [7]. The reason for the observed differences could be the inherent differences in health system structures, demographics and other socio-cultural factors [13]. These have implications on public health policies; interventions aimed at addressing disrespect and abuse as the cause of PPD should take into consideration variations in contextual factors that influence behaviors among birthing women and health care providers. Efforts should also be directed towards addressing the social and demographic determinants as predictors of postpartum depression among women. Our findings need to be interpreted with consideration of the following limitations; mental illness is perceived as detrimental to motherhood in most societies, and hence it is highly stigmatized, therefore, the possibility of underreporting among women in our study cannot be ruled out. Our findings also strengthen evidence of other studies that have identified the critical role of improved relationship between care

providers and women in ensuring respectful maternal care and reduction in incidents of postpartum depression [27]. Health system strengthening and practice that ensures enhanced ethical values are key in promoting respectful maternal health, these are also pivotal in eluding disrespect and abuse in maternal care. Postnatal services should incorporate critical assessment of signs of mental illness among women to enhance early intervention

Conclusion and recommendations

Disrespect and abuse during labour and delivery has potential of crafting adverse health outcomes. Our findings revealed that all women experienced some form of disrespect and abuse during child birth. The negative experiences during child birth defiles the fundamentals for healthy motherhood. This calls for the need to address the various forms of disrespect and abuse in order to promote respectful maternity health care and elude the potential outcomes of postpartum depression for both mothers and children. Health system strengthening through capacity building, training and support programs for health care providers and upholding of high patient ethical values are key to achieving this. Also, interventions should focus on addressing the socio-cultural and demographic factors that predict behaviour among health care providers. Postnatal services should incorporate critical assessment of signs of mental illness among women to enhance early intervention.

Declarations

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Availability of data and materials

The data is readily available upon request from the corresponding author.

Authors' contributions

All authors were responsible for the development and finalization of this paper.

Competing interests

The authors declare that they have no competing interests.

Conflict of interest

The authors declare that they have no conflict of interest

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Ethical Consideration

Ethical clearance was sought from Tropical Disease Research Center

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