

## ORIGINAL RESEARCH ARTICLE

# Abusive maternal care and associated factors during childbirth in Northeast Ethiopia

DOI: 10.29063/ajrh2022/v26i2.11

Lebeza Alemu Tenaw<sup>1\*</sup>, Vivian Onoh<sup>2</sup>, Melese Linger Endalifer<sup>1</sup>

Department of Midwifery, College of Health Sciences, Woldia University, Woldia, Ethiopia<sup>1</sup>; Center of Excellence in Reproductive Health Innovation (CERHI), University of Benin, Benin City, Nigeria<sup>2</sup>

\*For Correspondence: Email: [lebezaa@gmail.com](mailto:lebezaa@gmail.com); Phone: +251915717152

## Abstract

This study aimed to assess the abusive maternal care and associated factors during childbirth in North Wollo Hospitals, Northeast Ethiopia. The institutional-based cross-sectional study design was implemented with a sample size of 394. Stratified systematic random sampling was applied to select the study participants. The study population was women who gave birth in selected hospitals in the study period. Women with postpartum psychiatric problems and women who were referred for complications management after they gave birth in the other health institution were excluded. Data was collected by using a structured questionnaire adapted from the White Ribbon Alliance Declaration on women's rights during childbirth. Data were entered by EPI-data version 3.1 and analyzed by SPSS version 23. The magnitude of abusive care among childbearing women was 47.1%. Women who attended their childbirth at general hospital (AOR =0.13, 95% CI: 0.06, 0.26), women who had no antenatal care (AOR =2.08, 95% CI: 1.27, 3.39), and women who had two birth attendants (AOR =0.56, 95% CI: 0.35, 0.92) were significant association with abusive maternal care. The level of abusive maternal care in health institutions is high as compared to national and international standards. Women who attended their childbirth at a general hospital, having antenatal care and the number of birth attendants were significant factors. Interventions should focus on increasing pregnant women's ANC follow-up. The health institutions also better increase the number of skilled birth attendants to address women's concerns during childbirth. (*Afr J Reprod Health* 2022; 26[2]: 118-125).

**Keywords:** Abusive maternal care, associated factors, women, Ethiopia

## Résumé

Cette étude visait à évaluer les soins maternels abusifs et les facteurs associés lors de l'accouchement dans les hôpitaux du nord de Wollo, au nord-est de l'Éthiopie. La conception de l'étude transversale en établissement a été mise en œuvre avec une taille d'échantillon de 394. Un échantillonnage aléatoire systématique stratifié a été appliqué pour sélectionner les participants à l'étude. La population étudiée était constituée de femmes ayant accouché dans les hôpitaux sélectionnés au cours de la période d'étude. Les femmes ayant des problèmes psychiatriques post-partum et les femmes qui ont été référées pour la gestion des complications après avoir accouché dans l'autre établissement de santé ont été exclues. Les données ont été recueillies à l'aide d'un questionnaire structuré adapté de la Déclaration de l'Alliance du ruban blanc sur les droits des femmes pendant l'accouchement. Les données ont été saisies par EPI-data version 3.1 et analysées par SPSS version 23. L'ampleur des soins abusifs chez les femmes en âge de procréer était de 47,1 %. Les femmes qui ont accouché à l'hôpital général (OR = 0,13, IC à 95 % : 0,06, 0,26), les femmes qui n'ont pas reçu de soins prénatals (OR = 2,08, IC à 95 % : 1,27, 3,39) et les femmes qui avaient deux accoucheuses (AOR = 0,56, IC à 95 % : 0,35, 0,92) étaient une association significative avec des soins maternels abusifs. Le niveau de soins maternels abusifs dans les établissements de santé est élevé par rapport aux normes nationales et internationales. Les femmes qui accouchent à l'hôpital général, les soins prénatals et le nombre d'accoucheuses sont des facteurs significatifs. Les interventions devraient se concentrer sur l'augmentation du suivi prénatal des femmes enceintes. Les établissements de santé augmentent également le nombre d'accoucheuses qualifiées pour répondre aux préoccupations des femmes lors de l'accouchement. (*Afr J Reprod Health* 2022; 26[2]: 118-125).

**Mots-clés:** Soins maternels abusifs, facteurs associés, femmes, Ethiopie

## Introduction

Around the globe, around 303,000 women die annually of these 201,000 deaths being from Sub-Saharan Africa<sup>1</sup>. In Ethiopia, maternal mortality and morbidity levels are among the highest in the

world, which was 412 per 100,000 live births in 2016<sup>2</sup>. Even though skilled birth attendance during childbirth and immediate postpartum care can prevent 75% of maternal mortality; only 26% of women deliver their baby at health institutions<sup>3</sup>. Abusive care is a comprehensive term

that is expressed in the form of physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination based on specific patient attributes, abandonment of care, and detention in facilities<sup>4</sup>. This respectful maternity care is a universal right of every woman which is chartered at different times and compiled by White Ribbon Alliance in 2011<sup>5</sup>.

Enhancing institutional delivery coverage is a primary action to tackle maternal mortality. but inappropriate maternal care during childbirth decreases women's engagement in institutional delivery<sup>4</sup>. Skilled birth attendance during childbirth and immediate postpartum care can prevent 75% of maternal mortality but women are not willing to deliver in the health institutions due to ignorance of their sensitive issues by health care professionals, and the care given in the health institution is not psychological supportive of what they need<sup>3,6</sup>.

In South Africa, women were not volunteers to attend their pregnancy follow-up at the health institution because midwives were so rude and would only come for delivery care<sup>7</sup>. Nigerian women also do not utilize maternal health care at health institutions due to prior uncomfortable health service experiences or the fear of being humiliated by the health care staff<sup>8</sup>. A study conducted in Kenya revealed that the prevalence of any form of abusive care facing the women during service utilization was 20%<sup>9</sup> and 78.6% at governmental health institutions in Addis Ababa; Ethiopia<sup>10</sup>. Although abusive care during childbirth not only threatens women's rights to life and bodily integrity but also denies the institutional delivery preference of the women. Therefore, this study aimed to assess the magnitude of abusive maternal care and associated factors during childbirth in North Wollo Zone Hospitals, Northeast Ethiopia.

## Methods

### *Study settings*

An institution-based cross-sectional study was conducted in North Wollo zone governmental hospitals from June 20 to August 30, 2018. Even though there were five governmental hospitals in North Wollo zone, Ethiopia. Woldia general hospital and Lalibela primary hospital were selected for data collection based on their level of

representativeness in the Zonal health institutions. The study was conducted among women who gave birth in the selected hospitals during the study period. Women with postpartum psychiatric problems and women who were referred for complications management after they gave birth in the other health institution were excluded.

### *Sample size determination and sampling procedure*

The sample size was determined by using a single population proportion formula with the following assumptions, Proportion of abusive care in Addis Ababa governmental hospital was 81.8%<sup>10</sup>, marginal error (4%), and considering 10% for non-response rate. Therefore, the final sample size was 394.

### *Sampling procedure*

A stratified systematic random sampling technique was applied. The sample was proportionally allocated to the hospitals based on the patient flow rate of the delivery ward in one month period before the actual data collection period (Figure1).

### *Operational definitions*

Abusive maternal care can be experienced in various forms such as being ignored, shouted at, slapped by healthcare providers, and abandoned to deliver a child alone in health facilities. If the score of abusive maternal care assessing questions is greater than the mean score (21.12) the study considered the mother faced abusive care.

### *Data collection tools and procedure*

Data were collected from women who gave birth in their respective hospitals immediately at the time of discharge through the exit interview. The questionnaire has three parts, the first socio-demographic characteristics; obstetric history, and abusive maternal care packages (seven performance indicators and thirty-one verification criteria). To assess women's abusive care during childbirth, the questionnaire was adopted from White Ribbon Alliance, Federation of international gynecology and obstetrics, and Maternal and Child Health Integrated Program standards of respectful maternity care tool kit.

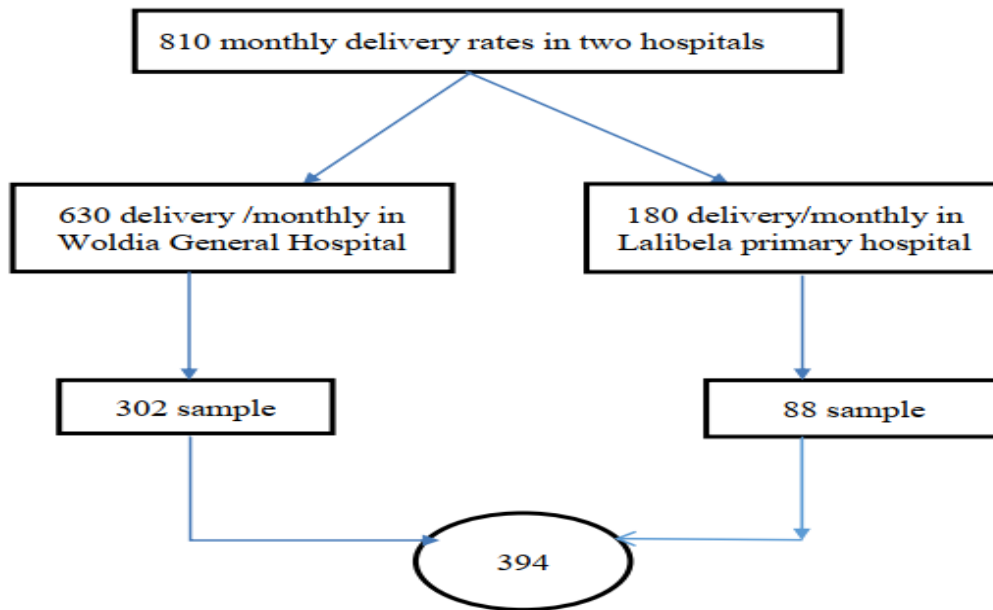


Figure 1: Sampling procedure

The organization listed above has prepared using seven performance standards and their respective verification criteria.

The seven performance standards are 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<sup>11</sup>. Six female data collectors who were not working in the respective hospitals were recruited to collect the data.

**Data quality assurance**

The questionnaire was prepared in English first then it was translated to the Amharic language by language professionals and translated back to English to maintain consistency. A pre-test was conducted at Woldia health center before two weeks of actual data collection period in 5% of the sample size. The data collector was given training by professionals on how to collect the data, and the principal investigator supervised and checked the completeness of the questionnaire.

**Data processing and analyses**

The data were checked for completeness after data collection and entered into Epi Data version 3.1 and analyzed by using SPSS version 23. Descriptive statistics were used to present the data. The

outcome variable has a binary response (yes/no). "Yes" is scored as "1" and "No" is scored as "0". Bivariate and multivariable logistic regression analysis was carried out. Model fitness was assured through Hosmer lemeshow assumption.

**Results**

**Magnitude of abusive maternal care among childbearing women**

The assessment of abusive maternal care was addressed through the White Ribbon Alliance declaration on the rights of childbearing women. This white ribbon alliance declaration has seven performance indicators. Most mothers (99.2%) suffered from at least one abusive care violation from thirty-one verification criteria. By using the mean as a cut-off point, the level of abusive care during childbearing was 47.1%.

About 97.3% of women suffered from at least one physical abuse component. A woman abused by physical force (slapping, aggressiveness, and beating) was 90.8%. Respect for women receiving care according to culture 90.1% were not treated accordingly. The prevalence of non-consented care was 98.6% (that means they received a minimum of one non- consented care from the components). Of all participants, 65.2 % were greeted by the health care provider, and only

**Table 1:** Socio-demographic characteristics of childbearing women in Northeast Ethiopia, 2018(n=382)

Characteristics	Categories	Frequency (%)
Age	<20	7(1.8)
	20-34	332(86.4)
	35-49	43(11.1)
Marital status	Married	336(87.5)
	Unmarried	32(8.3)
	Divorced	9(2.3)
	Other	5(1.3)
Educational status	No education	122(31.7)
	Elementary	122(31.7)
	Secondary	86(22.3)
	College and above	51(13.2)
Occupational status	Housewife	200(52.3)
	Merchant	69(18)
	Unemployed	30(7.8)
	Employed	46(12)
	Daily laborer	17(4.5)
	Farmer	10(2.6)
Residence	Other	10(2.6)
	Urban	238(62.3)
	Rural	144(37.7)

**Table 2:** Obstetric characteristics of childbearing women in Northeast Ethiopia, 2018(n=382)

Characteristics	Categories	Frequency (%)
<b>Gravidity</b>	1	139(36.3)
	2-3	195(51.1)
	>=4	48(12.6)
<b>The previous history of ANC follow up</b>	Yes	200(52)
	No	172(44.7)
<b>Previous institutional delivery history</b>	Yes	191(50)
	No	191(50)
<b>Duration after delivery</b>	0-6	111(58.1)
	6-24 hrs	50(26.2)
	>24 hrs	30(15.7)
<b>Number of birth attendant</b>	One	28(14.6)
	Two	95(49.7)
	>=3	68(35.6)
<b>Sex of birth Attendant</b>	Male	60(31.4)
	Female	35(18.3)
	Both sex	96(50.3)
<b>Types of hospital</b>	Primary	80(20.9)
	General	302(79.1%)
<b>Access other than a health care provider</b>	Yes	33(17.3)
	No	158 (82.7)
<b>Have you get any birth-related complication</b>	Yes	103(27)
	No	279(73)

27.7% were introduced by the health care provider. About 96.6 % of study participants received non-confidential care. Of the total 86.1% of the client's

information was protected from being transferred to others. Only 49.5 % gained a drape to cover the lower part of the abdomen during the diagnosis by the health care provider.

The overall prevalence of non-dignified care was 99% (that means they receive a minimum of one non-dignified care). From the total participants, only 18% of women were encouraged to practice cultural activities like (praying, reading, spiritual books, and holly pictures). Of the total women, 98.7 % of women were discriminated against during childbirth. Among the total; 96.6% of health care providers were communicating to the women in a language that she understands.

An additional 84.6 % of health care providers didn't show any disrespect to what they provided services. The prevalence of abandonment of care during childbirth was 97.4%. Around 80 % of women were well informed by a health care provider to call when they wanted and 86.4% of women were not left alone in the delivery room. The overall prevalence of detained care during childbirth in hospitals was 4.5%. More than 97% were not detained against their will and due to a lack of payment (Table 3).

**Factors associated with abusive maternal care**

In multivariable logistic regression analyses women who attended their childbirth at a general hospital, women who had antenatal care visits, and the number of birth attendants were significantly associated with abusive maternal care. Women who attended their childbirth at a general hospital 87% (AOR =0.13; 95% CI: 0.06, 0.26) decreased the odds of abusive maternal care as compared to the primary hospitals. Women who had no antenatal care 2.08 times (AOR =2.08; 95% CI: 1.27, 3.39) had higher odds of abusive maternal care compared to having ANC follow-up. Women attended by one health care provider (AOR =0.29; 95% CI: 0.1, 0.84) decreased the likelihood of abusive maternal care by 71% as compared to a woman attended by more than three health care providers. Receiving abusive maternal care among women attended by two health care providers was lowered by 44% as compared to a woman attended by more than three health care providers (AOR =0.56, 95% CI: 0.35,0.92) (Table 4).

**Table 3:** Level abusive maternal care among childbearing women Northeast Ethiopia, 2018(n=382)

Performance indicator	Verification criteria	Abusive care (n=382)	
		Yes (%)	No (%)
<b>Any form of physical abuse</b>		372(97.4%)	10(2.6)
	Uses physical force or abrasive behavior treated according to their culture	347(90.8)	35(9.2)
	Abandoning of body movement during labor	38(9.9)	344(90.1)
	Have you denied to drink and eat food during labour	13(3.4)	369(96.6)
	Get pain relief activity	95(24.9)	287(75.1)
	unnecessary separation between child and mother	75(19.6)	307(80.4)
<b>Any form of non-consented care</b>		344(90.1)	38(9.9)
	Get a greeting from the health care provider	377(98.6%)	5(1.3%)
	Introduces self to a woman and her companion	249(65.2)	133(34.8)
	Encourages companion to remain with a woman whenever possible	106(27.7)	276(72.3)
	Encourages woman and her companion to ask questions	321(84)	61(16)
	Responds to questions with promptness, politeness, and truthfulness	202(52.9)	180(47.1)
	Explains what is being done and Gives information on the status and findings of an examination	269(70.4)	113(29.6)
	Obtains consent or permission before any procedure	340(89)	42(11)
	Denying choice of position for birth	344(90)	38(10)
	Denying liberty of movement during labor	223(58.4)	159(41.6)
	Get information on the progress of labor	313 (82)	69(18)
<b>Any form of non-confidential care</b>		344(90)	38(10)
	Sharing client information to others without permission	369(96.6%)	13(3.4%)
	Uses curtains or other visual barriers to protect a woman during exams, procedures	53(13.9)	329(86.1)
	Uses drapes or covering appropriate to protect woman's privacy	270(70.7)	112(29.3)
	leave client records in areas where they can be read by others not involved in the care	189(49.5)	193(50.5)
<b>Any form of non-dignified care</b>		46(12)	336(88)
	Speaks politely to woman and companion	378(99%)	4(1%)
	Insults, intimidation, threats, or coerces woman or her companion	357(93.5)	25(6.5)
	Encouraged to practice cultural activities during labor like praying	46(12)	336(88)
<b>Any form of discriminated care</b>		69(18)	313(82)
	Speaks to the woman in a language and at a language level that she understands	377(98.7%)	5(1.3%)
	show disrespect to women based on any specific attribute/response	369(96.6)	13(3.7)
<b>Any form of abandonment of care</b>		59(15.4)	323(84.6)
	Provides basic essential care to the woman	372(97.4%)	10(2.6%)
	Get informed to call health care provider while she wants	373(97.6)	9(2.4)
	health care provider comes immediately while she wants	306(80)	76(29)
	Left alone in the delivery room	342(89.5)	40(10.5)
<b>Any form of details</b>		330(86.4)	52(13.6)
	Detains a woman against her will	17(4.5%)	365(95.5%)
	Detention of the woman in the facility due to lack of payment of facility fees	8(2)	374(98)
		11(2.9)	371(97.1)

## Discussion

The magnitude of abusive maternal care in this study was 47.1 % (95% CI 42.1-52.6). This finding is similar to a systemic review done on the mistreatment of women during childbirth in health facilities globally<sup>12</sup>. The finding of this study is lower than the study done in Addis Ababa which might be due to the study being implemented by the health care providers, unlike this study<sup>13</sup>. Among

the study participants, about 97.4% of women were suffered from at least one physically abuse (physical force or abrasive behavior, not treated according to her culture, abandoning of body movement during labor, denied to drink and to eat food during labor, didn't get pain relief activity and unnecessary separation between child and mother) which is higher than research conducted in Addis Ababa with a prevalence of physical abuse 2.3%<sup>14</sup> and 35.7% in Kenya<sup>15</sup>. This difference may result

**Table 4:** Multivariable regression table factor associated with abusive care during childbirth Northeast Ethiopia, 2018(n=382)

Variables		Abusive care		AOR (95%CI)	P-value
		Yes	No		
Type of hospital	General	112	190	0.131(0.066-0.261)	0.0001
	Primary	68	12	1	
Residence	Rural	71	73	1.671(0.984-2.838)	0.058
	Urban	109	129	1	
History of ANC follow up	No	102	70	2.080(1.277-3.390)	0.003
	Yes	78	132	1	
Occupation type	Housewife	72	128	0.440(0.129-1.495)	0.188
	Merchant	29	40	0.716(0.198-2.590)	0.61
	Unemployed	21	9	0.902(0.212-3.842)	0.889
	Government	31	15	1.510(0.392-5.808)	0.549
	Employee				
	Daily labourer	13	5	1.5150.301-7.631()	0.614
	Farmer	14	5	1	
Number of birth attendant	one birth attendant	7	21	0.29(0.1-0.845)	0.023
	2 birth attendant	87	106	0.568(0.35-0.923)	0.023
	>2 birth attendant	86	75	1	

Hosmer Lemeshow: P-value=0.742 1 =reference category Backward LR method was applied.

from socio-demographic variations among study participants.

Another studies conducted in six countries of Africa (Ethiopia, Kenya, Zanzibar, Rwanda, Madagascar, and Tanzania) through observation technique to assess abusive maternity care; the observer report applying episiotomy for all prime-gravida women were a routine practice in Ethiopia health facility which harm women's physically but this is not a common problem in the current study<sup>16</sup>. Regarding non-consented care, 98.6 % have received a minimum of one no-consented care; this is supported by other researchers<sup>12,17,18</sup>. This figure is much greater than the study conducted in Tanzania<sup>19</sup>. From the components 41.3% of women were denied position preference during childbirth; this figure is much higher than a study conducted in Addis Ababa with a proportion of 29%<sup>20</sup>. The variation might be the current study applying exit interview; the latter one conducted through direct observation; collecting data by direct observation gives more reliable data.

From all study participants 96.6 %, 99%, 98.7%, 99.4% of women receive non-confidential, discriminated, and abandonment of care respectively. This is also mentioned in other studies conducted elsewhere<sup>15,18,20-23</sup>. Confidentiality is mandatory and if it is not corrected early, it leads to a crisis in health care delivery. From the total participants, only 18% of women were encouraged to practice cultural activities like (praying, reading spiritual books, and holly picture), which shows

majority of women were restricted to express their feelings in the health institution this may result in spiritual stress, loneliness and complicate the outcome of labor. This is strongly evidenced by the obstetric care navigation approach: disrespectful care was highly experienced when cultural and contextual differences between indigenous patients and non-indigenous care providers present<sup>24</sup>.

The overall prevalence of detained care during childbirth in hospitals was 4.5%, which is lower than a study conducted in Nigeria<sup>15</sup>. In other wing a study conducted in Addis Ababa reported that women are free of detention care<sup>18</sup>. This is due to the declaration of delivering payment free service in the maternity ward by the Ethiopian government health policy. Women who attend their childbirth at general hospitals decrease the occurrence of abusive maternal care as compared to a primary hospital which may be due to the standard difference among hospitals and the number of health professionals with many specialties may available in the general hospitals than primary hospitals.

Women who had no ANC follow-up previously increased the occurrence of abusive maternal care as compared to those who had previous ANC follow-ups. Mothers who have ANC follow-up may develop a friendly relationship with the health care providers which make their delivery time easy and respectful. Women who attended her delivery by one or two health care providers decreased the

likelihood of abusive maternal care as compared to a woman who attended by more than three health care providers. The possible reason may be that as the number of birth attendants increases the client's privacy, information, confidentiality will have no guarantee, and this increases the occurrence of abusive maternal care during childbirth.

Social desirability bias is one of the limitations of this study, since women may report more acceptable responses. The questionnaire also does not address misleading medical procedures (aseptic technique, medical error, maleficence). This study did not establish a cause and effect relationship between independent and outcome variables due to the limitations of the cross-sectional study design.

## Conclusion

The level of abusive maternal care in the health institutions was high as compared to different international declarations which affect women's willingness to attend their childbirth in the health facility. Women who attend their childbirth at general hospitals, having antenatal care visits and the number of birth attendants were significantly associated with abusive maternal care. The interventions should focus on increasing pregnant women's ANC follow-up. Health institutions also better increase the number of skilled birth attendants to address women's concerns during childbirth.

## Ethical considerations

Ethical clearance was obtained from Woldia University ethical clearance committee. A formal letter was given to the selected health institutions from the health science college. Moreover, informed verbal consent was obtained from each respondent since our study participants are not literate and they informed their right to withdraw from the study at any time. Confidentiality and privacy of participants were secured by omitting any identifier.

## Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

## Competing interest

The authors declare that they have no competing interests.

## Funding

The study was funded by Woldia University. The funder has no role in designing the study and collection, analysis, interpretation of the data, and writing up of the manuscript.

## Authors' contributions

LAT: Designed the study, collect and analyse the data, and prepared the manuscript

VO: Manuscript editing

MLE: Collected and analysed the data, and prepared the manuscript.

## References

1. Alkema L, Chou D and Hogan D. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. 2015.
2. Survey DaH. Maternal and perinatal country profile. Ethiopia: Department of Maternal, Newborn, Child and Adolescent Health, 2011.
3. Central Statistical Agency (CSA) [Ethiopia] and ICF. Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.
4. Bowser D and Hill K. Exploring Evidence for Disrespect and Abuse in Facility-Based Childbirth. *USAID-TRAction Project*. USA: Harvard School of Public Health, 2010.
5. Alliance WR. Respectful Maternity Care: The Universal Rights Of Childbearing Women. 2011.
6. Shiferaw S, Spigt M, Godefrooij M, Melkamu Y and Tekie M. Why do women prefer home births in Ethiopia? *BMC pregnancy and childbirth*. 2013; 13: 5.
7. Jewkes R, Abrahams N and Mvo Z. Why Do Nurses Abuse Patients? Reflections from South African Obstetric Services. *Article in Social Science & Medicine*. 1999.
8. Women CfRRa. Broken Promises: Human Rights, Accountability, And Maternal Death In Nigeria. *WARDC*. 2008.
9. Abuya T, Warren CE and Miller N. Exploring the Prevalence of Disrespect and Abuse during Childbirth in Kenya. *PLOS*. 2015.
10. Asefa A and Bekele D. Status of respectful and non-abusive care during facility-based childbirth in a hospital and health centers in Addis Ababa, Ethiopia. *Reproductive Health*. 2015; 12.
11. Alliance WR. Respectful Maternity Care: The Universal Rights Of Childbearing Women. 2005.
12. Meghan A, Bohren, Joshua P. Voge, Erin C and Hunter. The Mistreatment of Women during Childbirth in Health Facilities Globally: A Mixed-Methods Systematic Review. *PLoS Med* 2015; 12.
13. Sacks E. Defining disrespect and abuse of newborns: a review of the evidence and an expanded typology of

- respectful maternity care. *Reproductive Health*. 2017; 14.
14. Asefa A and Bekele D. Status of respectful and non-abusive care during facility-based childbirth in a hospital and health centers in Addis Ababa, Ethiopia. 2015.
  15. Okafor II, Ugwu EO and Obi SN. Disrespect and abuse during facility-based childbirth in a low-income country. *International Journal of Gynecology & Obstetrics* 2014; 08.
  16. Rosen HE, Lynam PF and Carr C. Direct observation of respectful maternity care in five countries: a cross-sectional study of health facilities in East and Southern Africa. *BMC Pregnancy and Childbirth*. 2015; 15.
  17. Sando D, Abuya T and Asefa A. Methods used in prevalence studies of disrespect and abuse during facility-based childbirth: lessons learned. *Reproductive Health*. 2017; 14.
  18. Daniel E. Identifying and Measuring Women's Perception of Respectful Maternity Care in Public Health Facilities. *Institute of psychology*. Addis ababa: addis ababa.
  19. Sando D, Ratcliffe H, and McDonald K. The prevalence of disrespect and abuse during facility-based childbirth in urban Tanzania. *BMC Pregnancy and Childbirth*. 2016; 16.
  20. Ephrem D, Sheferaw, Eva Bazant, and Hannah Gibson. Respectful maternity care in Ethiopian public health facilities. *Reproductive Health*. 2017; 14.
  21. Savage V and Castro A. Measuring mistreatment of women during childbirth: a review of terminology and methodological approaches. *Reproductive Health*. 2017.
  22. Asefa A, Bekele D, Morgan A and Kermode M. Service providers' experiences of disrespectful and abusive behavior towards women during facility-based childbirth in Addis Ababa, Ethiopia. *Reproductive Health*. 2018; 15.
  23. Kruk ME, Kujawski S, Mbaruku G, Ramsey K, Moyo W and Freedman LP. Disrespectful and abusive treatment during facility delivery in Tanzania: a facility and community survey. *Health Policy and Planning*. 2014.
  24. Austad K, Chary A and Martinez B. Obstetric care navigation: a new approach to promote respectful maternity care and overcome barriers to safe motherhood. *Reproductive Health*. 2017; 14.