

Maternal Disrespect and Abuse among Mothers who gave childbirth at Public Health Facilities and Associated Factors in Gondar town, Northwest, Ethiopia

Agerie Mengistie Zeleke (MSc)^{1*}, Gashaw Melkie Bayeh (MPH)²

¹ Lecturer, Department of Midwifery, School of Public Health, Teda Health Science College, Gondar, Ethiopia

² Lecturer, Department of Environmental Health, School of Public Health, Teda Health Science College, Gondar, Ethiopia

ARTICLE INFO	ABSTRACT
<p><i>Article type:</i> Original article</p>	<p>Background & aim: Respectful and non-abused maternal healthcare services can reduce maternal and child mortality rate. However, there is a scarcity of evidence on status of maternal health services. Therefore, this study aimed to assess maternal disrespect and abuse during maternal health service.</p>
<p><i>Article History:</i> Received: 26-Dec-2021 Accepted: 24-Jan-2022</p>	<p>Methods: An institution-based cross-sectional study was employed among 415 post-partum mothers from March 1st to May 30th, 2020. A stratified random sampling technique was used to select participants. Data were collected using a structured pretested questionnaire, entered into Epi-Data version 3.1, and then exported to SPSS version 20 software for analysis with descriptive and inferential statistics.</p> <p>Results: The study revealed that 49.6% (95% CI: 44.7–55.0) of mothers experienced disrespect and abuse during receiving care. Non-confidential care (49.9%), unconsented care (35.8%), and delayed care (28.7%) were the most frequently mentioned disrespects and abuses. Being uneducated (AOR = 0.32, 95% CI: 0.13–0.75), having ANC visits (AOR = 0.19, 0.07–0.52), hospital delivery (AOR = 1.88, 95% CI: 1.18–1.97), staying more than 12 hours in health facility (AOR = 1.84, 95% CI: 1.13–0.01), having birth complications (AOR = 2.56, 95% CI: 1.52–2.28), and instrumental delivery (AOR = 2.75, 95% CI: 1.62, 4.65) were predictors of disrespect and abuse care.</p> <p>Conclusion: Maternal disrespect and abuse was common during maternal healthcare services. To decrease maternal and child mortality, providing respectful and non-abused maternal healthcare and safeguarding women's fundamental rights during facility delivery is necessary.</p>
	<p>► Please cite this paper as: Mengistie Zeleke A, Melkie Bayeh G. Maternal Disrespect and Abuse among Mothers who gave childbirth at Public Health Facilities and Associated Factors in Gondar town, Northwest, Ethiopia. Journal of Midwifery and Reproductive Health. 2022; 10(1): 3165-3174. DOI: 10.22038/jmrh.2022.62507.1767</p>

Introduction

Despite significant progress in maternal and neonatal mortality rates with the use of skilled childbirth attendance, women are still disrespected and abused (D and A) during labor delivery at health facilities around the world(1, 2). It is a major problem and important barriers to maternal health services during labor and delivery service utilization (3, 4).

Throughout low-income countries, D and A, which includes physical abuse, non-dignified care, non-consented care, confidential care, discrimination, and abandonment of care, during labor delivery, lead to low utilization of

maternity services in health facilities(5, 6). Other evidence also shows that mistreatment, disrespect, and abuse during maternal health care hampers utilization of the services that could affect post-partum follow-up and uptake of essential maternal health services(7, 8).

Provision of respectful and non-abused maternal care is positively attributed to reducing maternal and child mortality and realization of sustainable development goals(9, 10). In addition to this, the provision of women-centered health care approach services and clients' satisfaction with healthcare providers

* Corresponding author: Agerie Mengistie Zeleke, Lecturer, Department of Midwifery, School of Public Health, Teda Health Science College, Gondar, Ethiopia. Email: ageriemengistie@gmail.com

are important elements to increase maternal health service utilization in a respectful manner(3, 11). Now, respectful maternity care is a top priority in the World Health Organization's (WHO) released a guideline on the prevention and elimination of D&A approach during provide facility-based childbirth(12). This guideline is very important to address the quality of maternal and newborn health (MNH) services by providing respectful maternity care (RMC)(12). It also calls for fostering positive staff attitudes and behaviors to make conducive environment between women and provider during childbirth(13).

Even though Ethiopia's ministry of health compassionate, respectful, and caring (CRC) initiatives incorporated in a five-year health sector transformation plan agenda to improve service uptake and utilization of series in the health facilities, it has received number of child birth in health facility less attention barriers of accessing to the quality of services and choice of maternal care during labor and delivery(14). These showed that among the mothers who received only four ANC visits (43%) and, births attended in a health facility were 48% in Ethiopia (15, 16).

Previous research found that maternal disrespected and abused care during labor and delivery was significantly related to educational status, marital status, the barrier to skilled care utilization, poor maternal and neonatal outcomes in private health facilities, poor health facility management, lack of training and professional burnout, history of ANC, mode of delivery, parity, and mother's birth preferences(17-20). In addition to exposing privacy and information of clients, they did not provide continuous emotional support, the intention to use the facility for delivery, and often not respect women's rights and ever physical abuse were increasing factors of D and A during maternity service in a health facility (21-23). However, there is paucity evidence on the status of maternal D and A during maternal health service in the study setting after providing CRC training has been given to many health care providers. Thus, this study is aimed to determine the status of D and A of maternal health services among childbirth women who gave birth in public health facilities. Findings

from this research could help health administrators identify evidence-based interventions that could strength the quality of maternal service utilization.

Materials and Methods

The institution-based cross-sectional study design was employed among 415 pregnant women in Gondar public health facilities Northwest Ethiopia from March 1 to May 30, 2020.

In Gondar town, there are eight public health centers, one teaching comprehensive referral public hospital, and two private hospitals for providing maternal health services. Most maternal health services, like antenatal care, labor delivery, postnatal, and vaccination services, are provided free of charge as exempted services. The study was done in all the eight health facilities: Gondar comprehensive referral hospital, Azezo, Maraki, Teda, Mentiwabe, Woleka, Belagig, and Geberiel health centers.

The source population was all mothers who had given birth at Gondar governmental facilities were the study population while, the study population were included all the randomly selected post-partum mothers during the data collection period at postnatal Rome. Mothers who were fundamentally unstable after delivery and those who had postnatal depression were excluded from the study.

The sample size was determined by using a single population proportion formula based on the following assumptions: 95% level of confidence.

The sample size was estimated using single population proportion which was prevalence of disrespect and abuse ($P = 57\%$)from a previous study(24). 5% marginal error and 10% non-response rate yielded the final sample size was 415 postpartum mothers. According to the facility statistics of Gondar town health administration reports showed that the annual number of deliveries in eight public health facilities was 3450. Each participant was selected using a stratified random sampling technique from nine health facilities Gondar town and the sample size was proportionally allocated to all eight health centers and one hospital based on an average annual labor and delivery rate.

The data collection tool were prepared from D and A during childbirth was measured using eight performance standards (categories of disrespect, unfriendly care, and abuse) and their respective verification criteria which developed by Bowser and Hill's framework(25) and respectful maternity care toolkits. Data were collected using a structured questionnaire from the study participants. The tools consist of three sections; socio-demographic, obstetric characteristics, and categories of disrespect and abuse experienced during childbirth at facilities. Data were collected by three BSc degree holder midwife profession and one master degree holder who work in the other than study area.

Face and content validity of the study instrument was done by allocating the instrument to review by experts in companionate and respectful trainers. Each item of the instruments was reviewed to ensure their appropriateness and ability to meet the stated objective of the study. Necessary corrections were effected on the research instruments after review by experts.

The reliability of the questionnaire was assessed through test-retest method to access stability of the research instruments. This involved administering the questionnaire to pregnant women in a health facility within the study area. This was repeated two weeks apart while internal consistency of questionnaire was examined by calculating Cronbach's alpha value (Cronbach's alpha value = 0.71) for the questionnaire. Multicollinearity was also checked to see the linear correlation between the independent variables by using a standard error and variance inflation factor. Variables with the standard error of >2 and the variance inflation factor (VIF) from one to ten were checked by the multiple analysis. The continuous variables such as age were tested using the normal curve with a histogram

A pre-test was done on 5 % of the sample size (20 participants) in Dabat health facility. One day training was given both for the data collectors and supervisor before the actual data collection. During data collection, the supervisor has checked how the data collection process was going on. At the end of each data collection, the principal investigators also checked the completeness of the filled questionnaires.

The outcome variable was maternal D and A during maternal health care, while others like socio-demographic variables (including age, religion, residence, occupation, education, family size and marital status, monthly income) and obstetric history (parity, pregnancy status, ANC follow-up, place of delivery, length of stay in health facility) were the explanatory variables

The status of maternal disrespect and abuse during childbirth was assessed based on a related nine categories (physical abuse, non-consented care, non-dignified care, discrimination, abandonment/neglect, detention, non confidential, untimely care, and non-friendly care) of maternal disrespect and abuse during childbirth questionnaire which contained a (yes and no), which were used for the analysis of the responses. Accordingly, the mean of the responses was computed. Participants who had at least one of the nine categories faced disrespect and abuse during child birth services were labeled as having disrespect and abuse care during childbirth(25). Timely care means providing service within less than one hour with practiced cultural rituals in the health facility(26). Friendly care is care that provides services that are acceptable to the woman, like respecting her beliefs, traditions, and culture. It includes a family, partner, or other support person in care "provides relevant and feasible advice." It empowers a woman and her family to become active participants in care. considers the rights of the woman (right to information about her health, the right to be informed about what to expect during the visit, and obtains permission/consent before exams and procedures (27). All healthcare staff ensures that they have good interpersonal communication skills to consider the woman's emotional, psychological, and social well-being.

Data entry were performed using the statistical program Epi-Data version 3.1 and then exported into SPSS version 20 for analysis. Binary logistic regression (Bivariable and multiple) was performed to identify statistically significant variables using a cut-off p-value < 0.25 in the bivariable analysis to identify candidate variables for multiple logistic regressions. P-value of less than 0.05 was declared significant in the multiple binary logistic regression models.

Ethical approval was obtained from the Ethical Review Committee of Amhara Public Health Institution (APHI). After an official letter had been submitted to the North Gondar zonal health department's office, permission letters were collected from both North Gondar zonal health department's office and each health facility office. Informed verbal consent was obtained from the study respondents. Names or specific addresses of the study participants were coded and kept anonymous, and confidentiality was assured. Their rights not to participate, not to answer any or all questions at any time they want were respected.

Results

A total of 407 post-partum mothers were involved in the final analysis, with a response rate of 97.1%. The mean age of the respondents was 29.11 years (SD 6.12), and 28.7% of the respondents were aged between 25 and 29 years.

Table 1. Socio-demographic characteristics of maternal D and during maternal health care in Gondar town, northwest Ethiopia, 2020(n=407)

Characteristics	Frequency (%)
Age	
15-19	31 (7.6)
20-24	79 (19.4)
25-29	117 (28.7)
30-34	106 (26.0)
≥35	74 (18.3)
Religion	
Orthodox	206 (50.6)
Muslim	53 (13.0)
Catholic	77 (18.9)
Protestant	59 (14.5)
Others	12 (2.9)
Educational status	
No formal education	93 (22.9)
Primary school	209 (51.4)
Secondary school	39 (9.6)
Diploma and above	66 (16.2)
Occupation	
House wife	166 (40.8)
Private business	49 (12.0)
Government employee	87 (21.4)
merchant	90 (22.1)
Others	15 (3.7)
family monthly income of	
<1500	63 (15.5)
1501-2500	63 (15.5)
≥2501	281 (69.0)

Characteristics	Frequency (%)
Residence	
Urban	157 (38.6)
Rural	250 (61.4)

Almost half of the 206 (50.6%) belonged to the Amhara ethnic group, were Christians, and were married (59.7%). Regarding respondents' occupations, about 166 (40.8%) were housewives, and more than two-thirds (69.0%) of them had an average monthly family income of more than 2501 Ethiopian birr. Two hundred and fifty (61.4%) of post-partum mothers were from rural catchment areas. More than half of the 209 (51.4%) had a primary level of education (Table 1).

Obstetric characteristics

Of those, nearly two-thirds (63.4%) of mothers were multiparous. The majority (81.8%) had ANC follow-up for their recent pregnancies, of which 56.7% had four or more visits. The majority of pregnancies (89.9%) of recent deliveries were wanted and supported; 70.3% of mothers gave birth through spontaneous vaginal deliveries (SVD), and 55.5% of births were attended by midwives, of which 55.5% were male providers. About 31% of mothers faced birth complications during labor and delivery, and 34.4% stayed in the hospital more than twelve hours after delivery at a health facility (Table 2).

Maternal D and A during maternal health care

Of the total participants, 49.6% of mothers experienced at least one form of D and A, of which 35.9% of mothers reported non-consented care, half (49.9%) of them also witnessed non-confidential care, and 17% of mothers experienced abuses, of which physical abuse (92.1%) and verbal insult (91.6%) were the most common abuses mentioned. Mothers reported that about 33 (8.1%) of health providers speak in a language that mothers can't understand. From 407 respondents, 32 (7.9%) of women were not saved from physical harm or ill-treatment, slapped and pushed during give birth (Table 3).

Table 2. Obstetric characteristics of maternal D and A during maternal health care in Gondar town, northwest Ethiopia, 2020 (n=407)

Variable	Frequency (%)
Parity	
Perimiparous	149 (36.4)
Multiparous	258 (63.6)
Pregnancy status	
Wanted /planned	366 (89.9)
Unwanted /unplanned	41 (10.1)
Had ANC follow up for the recent pregnancies	
Yes	374 (81.8)
No	33 (10.1)
Number of ANC visits (n=374(
1-3	162 (43.3)
≥4	212 (56.7)
Place of ANC	
Public	296 (72.7)
Private	78 (19.2)
Previous history of delivery in public health facilities	
Yes	205 (50.4)
No	203 (49.6)
Place of delivery for recent birth	
Hospital	222 (54.5)
Health center	185 (45.5)
mod of delivery current pregnancy	
SVD	274 (67.3)
Instrumental	118 (29.0)
C/S	15 (3.7)
Who attend the labor and delivery	
Doctor	162 (39.8)
Midwife	226 (55.7)
Other	19 (4.7)
Sex of labor attendant	
Male	192 (47.2)
Female	149 (36.6)
Both	66 (16.2)
Had birth complications	

Variable	Frequency (%)
Yes	126 (31.0)
No	281 (69.0)
Length of stay in health facility	
≤12 hour	267 (65.6)
>12 hours	140 (34.4)
Intention to give birth for the future pregnancies	
Yes	368 (90.4)
No	39 (9.6)
The reason unintentional to give birth at HF N=39	
I am to satisfied	24 (5.9)
Home is better	15 (3.7)

Note: (*) Remind as HC- health center, SVD- spontaneous vaginal delivery, CS-caesarian section and HF-health facility

Factors with D and A of maternal health care Findings from binary logistic regression analysis, age, and mother's level of education, family monthly income, parity, and mode of delivery, health facility difference, faced complications, and length of hospital stay above 12 hours have a p-value less than 0.2, which makes them candidates for multiple logistic regressions. Predictors for maternal D and A experienced during health care service provision In multiple logistic regression, the mother's level of education, having mothers' ANC follow-up, mode of delivery, delivered in hospital, complications, and length of hospital stay greater than 12 hours were significantly associated with experience of maternal D and A during health care service provision.

Thus, among mothers who had no formal education, the odds of maternal disrespect and abuse were increased by 3.3 times compared to those who had a diploma and above (AOR = 3.32, 95% CI: 2.135–9.753).

Table 3. The categories of D and A care during childbirth Care in Gondar town, Health facility, Northwest, Ethiopia, 2020

Maternal disrespect and abuse domains	Experienced disrespect and abuse	
	Yes %	No %
Un friendly care		
I felt that HW cared with a kind approach	377(92.6)	30(7.4)
Health professional treated me with respect	370(90.9)	37(9.1)
Health professional speak in a language that can understand	374(91.9)	33(8.1)
Health professional called me by my name	370(90.9)	37(9.1)
Health professional explain to you all the procedures	356(87.5)	51(12.5)
Health professional explain the results of the health examination	356(87.5)	51(12.5)
Abused care		
Health professional physically hit, slapped, pushed, pinched	375(92.1)	32(7.9)
Verbally (insulting) abuse	373(91.6)	34(8.4)
Separate mother from neonate without evidence	44(10.8)	363(89.2)
Support staffs inappropriate way	356(87.5)	51(12.5)
Receiving unscientific pain-relief treatment	46(11.3)	361(89.7)
Not timely care (delayed care)		
Denied from food unless medically necessitated	50(12.3)	357(87.7)
Waite long time before receiving service	99(24.3)	308(75.7)
practice cultural rituals in the facility	310(76.2)	97(23.8)
Discrimination care		
Service delayed due to internal problem	81(19.9)	326(80.1)
Health professional didn't uses drapes	141(34.6)	266(65.4)
Health professional discussed private health information	277(68.1)	130(31.9)
Non-consented care		
Health professional keeping my information	378(92.9)	29(7.1)
Health professional has well come face greeting mother	328(80.4)	79(19.6)
Health professional encourage mother to ask questions	301(74.0)	106(24.0)
Health professional obtains permission any procedure	99(24.3)	308(75.4)
Non-confidential care		
Health professional not-explain what is being done	100(24.6)	307(75.4)
Health professional use non-dignified speaking rudely	45(11.1)	362(88.9)
Health professional shouted at or scolded you	59(14.5)	348(85.5)
Non-dignified care		
Health professional made negative comments about you		
delay in receiving care after decision made	366(89.9)	41(10.1)
Health professional not provide supplies, if available	41(10.1)	366(89.9)
Abandonment / neglect		
Health professional ignored when you called for help	387(95.1)	20(4.9)
Health professional delay service even when staffing is adequate	24(5.9)	383(94.1)
Health professional discriminated by any differences	374(91.9)	33(8.1)
Health professional discriminated by ages	371(91.2)	36(8.8)
Detention in the health facilities		
Retain in the health facility due to unable to pay	370(90.9)	37(9.1)
Failure to settle medical bills	350(86.0)	57(14.0)

Table 4. Bivariate and multiple logistic regression analysis of D and A and their explanatory variables, in Gondar town Health facility, Northwest Ethiopia 2020 (n= 407)

Variables	Disrespectful & abuse care		COR(95% CI)	AOR(95% CI)
	Yes	No		
Age				
15-19	10	21	0.66(0.593-3.506)	3.26(0.812-13.400)
20-24	42	37	1.57(0.335-1.203)	0.61(0.231-1.556)
25-29	62	55	1.56(0.355-1.151)	0.60(0.246-1.430)
30-34	57	49	1.61(0.340-1.128)	0.59(0.235-1.468)
≥35	31	43	1.00	1.00
Educational status				
No formal education	47	46	2.96(1.894-5.388)	3.32(2.135-9.753) *
Primary	86	123	2.02(0.763-3.504)	1.44(0.734-2.813)
Secondary	15	24	1.80(1.484-2.844)	0.98(0.383-2.483)
Diploma and above	17	49	1.00	1.00
Monthly income				
≤1500	27	36	0.44(0.997-4.121)	0.58(0.337-1.296)
1500-2500	38	25	0.89(1.303-3.3951)	1.56(0.783-3.086)
≥2500	177	104	1.00	1.00
Parity				
Periparous	82	67	1.00	1.00
Multiparous	160	98	1.33(0.896-2.014)	1.34(0.684-2.623)
ANC follow up				
Yes	177	197	0.29(0.126-0.654)	0.20(0.075-0.525) **
No	25	8	1.00	1.00
Current mode of delivery				
SVD	155	119	1.00	1.00
Assisting Instrumental	41	77	0.41(1.563-3.828)	2.29(1.367-3.851) *
C/S	6	9	0.52(0.677-5.641)	1.31(0.395-4.316)
Health facility				
Hospital	113	92	0.70(0.896-2.014)	1.88(1.183-2.977) *
Health center	129	73	1.00	1.00
Birth outcome complication				
Yes	110	103	0.50(0.335 -0.751)	2.56(1.525-4.283) **
No	132	62	1.00	1.00
Stay more than 12 hour				
Yes	118	105	0.54(0.263-0.590)	2.69(2.038-4.728) *
No	124	60	1.00	1.00
Length of stay in hospital				
≤12 hours	146	121	1.00	1.00
>12hours	56	84	1.81(1.195-2.741)	1.84(1.129-3.007) *

Key: * significant at p-value <0.05, P-value** ≤ 0.001, 1.00= Reference

Discussion

The aim of this analysis was to search the level of maternal D and A during maternal health care delivery. Based dimensions of the Bowser and Hill (2010) landscape analysis of disrespect and abuse during facility-based childbirth(28). Even though it is unspoken, disrespect and abuse are serious issues that occur worldwide.

Findings revealed that the status of disrespect and abuse was 49.6%, with a 95%

CI of (44.7–55.0). This figure was lower than the results in Bahir Dar, Ethiopia, at 67.1%(29). This discrepancy might be due to differences in the approach between community-based and health facilities. Mothers may be frustrated by reports of abuses and disrespect while they are in health facilities because of fear of denial of services. Thus, mothers in the post-partum period at health facilities underreported disrespect and were given bussed care. On the other way, this finding was significantly higher than the result in Tanzania (15%) (30), and the bale zone of Ethiopia (37.5%)

(22). This discrepancy might be attributed to the presence of on-the-job training on Respectful Maternity Care (RMC) in the present study, and study participants of the previous study had an average of 12% experience of psychiatric depression during the data collection period (22). Thus, psychiatric depression clients couldn't be differentiated from disrespected and abused care.

According to this funding, the most happened component of D and A was non-confidential care (49.9%). This result higher than compared to studies done in African countries; Tanzanian at 19% and Nigeria at 29.4% (30, 31). This could be because of differences in health system management and study population differences. Also, healthcare workers' discipline and compassion were responsible for the observed discrepancies. In addition, this study also revealed that more than one-third (35.9%) experienced D and A related to non-consented care. This finding was lower than studies in Jimma (51.8%) and Addis Ababa (90%) (21, 32). The difference might be due to the health care providers healthcare providers may have been trained in compassionate, respectful, and caring training that improves the quality of health care services and women may not want to negatively evaluate health workers. This study also reported that not timely (delayed) care was witnessed by 37.6% of postnatal women, which was significantly higher than the resulted in Tanzania of them received not timely care (7.9 %) (30).

In the present many factors did not show association between status of disrespectful and abused maternal care in health facilities. However, some factors contributed to disrespectful and abused maternal care in health facilities, which could be individual-level or organizational factors (33). Thus, mothers who had no formal education were associated with higher odds of disrespect and abuse compared to those who had a diploma or above. This showed that mother who had better quality of care in the facility-based child birth intervention, including respectful approach from providers, which supports the likelihood that the intervention was responsible for the reduction in disrespect and abuse. This finding supports that of a study conducted in Nigeria which was revealed that those women who had no formal education were experiencing D and A maternity care (34).

Similarly, the present study also reported that mothers who had ANC follow-up during pregnancy were associated with lower odds of maternal disrespect and abuse compared to those who had no follow-up. This finding was in line with those of studies from Addis Ababa, Bahir Dar, Ethiopia, and Tanzania (34-36). On the other hand, deliveries assisted by instruments are associated with higher odds of maternal disrespect and abuse compared to spontaneous vaginal deliveries. This finding was in line with the study Addis Ababa (21). The findings of the current study also showed that mothers who give birth at hospitals are more likely to have disrespected and abused. This might staffs worked in comprehensive referral hospital had more workload and dissatisfaction by overloaded child birth mothers fellows than staffs who work in health center, as result, mothers were not received respectful maternal care and clients' referred from rural health unable to communicate with the staff with timely due to language barriers. This finding was supported by the different previous studies (11, 21). It's also often argued that hospital settings are loaded with the responsibility of providing many referral mothers during childbirth, since hospital facilities are unable to provide the minimum requirements for their health rights and clients' safety (37).

In addition, a current study also showed that mothers who delivered and stayed more than 12 hours in health facilities were more risks to have disrespected and abused during maternal care (5, 24). This could be due to the communication barrier and the healthcare professional's workload that leads to delayed care and follow-up. Moreover, mothers who experienced birth-related complications were associated with higher odds of maternal disrespect and abuse. This result was consistent with that of evidence from Malawi (38). This study was the analytic approach and data was collected on the spot, there was no recall bias. Despite this, the current study is an institution-based study that could not be generalized to the whole population. This study didn't include the qualitative study design necessary for the triangulation of evidence by assessing beliefs and perceptions of maternal disrespect and abuse.

Conclusion

Finding revealed that maternal D and A was common during maternal health care service

provision, of which non-confidential, non-consented, and delayed care were commonly mentioned disrespects and abuses care. Uneducated mothers had ANC follow-ups associated with an increased incidence of maternal disrespect and abuse. Conversely, during instrument-assisted delivery, experiencing birth complications, delivering in hospitals rather than health centers, and staying more than twelve hours in health facilities were linked with higher D and A care. Key implication of this finding is that efforts to increase facility-based delivery must address disrespect and abuse to ensure higher utilization and to safeguard women's fundamental rights during facility delivery.

Acknowledgements

We acknowledge participants, data collectors, supervisors, and health facility manger of health centers and hospital of Gondar town.

Conflicts of interest

Authors declared no conflicts of interest.

References

1. Filby A MF, Portela A. What prevents quality midwifery care? A systematic mapping of barriers in low and middle income countries from the provider perspective. *PLoS One*. 2016; 11(5): e0153391.
2. Freedman LP KM. Disrespect and abuse of women in childbirth: challenging the global quality and accountability agendas. *Lancet*. 2014; 384(9948): e42-e44.
3. Miller S AE, Chamillard M, Ciapponi A, Colaci D, Comande' D, et al. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide *The Lancet*. 2016; 388(10056): 2176-2192.
4. Organization WH. Health in 2015 from MDGs to SDGs. Available from: http://www.who.int/gho/publications/mdgs-sd_gs/en/. 2015
5. Innocent IO, a. Emmanuel ,O. Ugwu ,b. Samuel ,N. Obi, b. Disrespect and abuse during facility-based childbirth in a low-income country. *International Journal of Gynecology and Obstetrics*. 2015; 128(2): 110-113.
6. Heather E, Rosen PFL, Catherine Carr,etal. Direct observation of respectful maternity care in five countries. *BMC Pregnancy and Childbirth* 2015; 15(1): 306.
7. Reis V DB, Catherine Carr C, etal. Respectful maternity care. Washington DC: USAID.
8. Bekele W, Bayou NB, Garedew MG. Magnitude of disrespectful and abusive care among women during facility-based childbirth in Shambu town, Horro Guduru Wollega zone, Ethiopia. *Midwifery*. 2020; 83: 102629.
9. WHO. Ethiopia Demographic and Health Survey Maryland The DHS program ICF Rockville. 2016.
10. McMahon SA GA, Chebet JJ, Mosha IH, Mpembeni RN, Winch PJ. Experiences of and responses to disrespectful maternity care and abuse during childbirth; a qualitative study with women and men in Morogoro Region, Tanzania . *BMC pregnancy and childbirth*. 2014; 14(1):1.
11. Gebresilasea Gendisha Ukke MKG, Wanzahun Godana Boynito. Disrespect and abuse of women duringchildbirth in public health facilities in Arba Minch town, south Ethiopia - a cross-sectional study. *pLOS one*. 2019 Apr 29; 14(4): e0205545. <https://doi.org/10.1371/journal.pone.0205545> 2019.
12. WHO. The prevention and elimination of disrespect and abuse during facilitybased childbirth. WHO_RHR <http://iris/bitstream/m/106/65/2016;134588/1>.
13. Adeneye O. A A, Veronica F,T. Babajide. Examining Attitude towards Continuous Assessment Practices among Nigerian Preservice STM Teachers. *Journal of Education and Practice*. 2013; 4(13): 1735-2222.
14. Organization WH U. Trends in maternal mortality: 1990 to 2013The World Bank and the United Nations Population Division: executive summary. estimates by WHO, UNICEF, UNFPA. 2014.
15. Tollera DG. National CRC Training Participant Manual. Federal Ministry of health of Ethiopia. 2017.
16. Rockville M, USA: EPHI and ICF. Ethiopia Mini Demographic and Health Survey Ethiopian Public Health Institute (EPHI) [Ethiopia] and ICF. 2019.
17. Atai OP IH, Wakasiaka S, Jebet J, Oyieke J. Prevalence of disrespectful maternity care and abuse among women seeking maternity care services at the Kenyatta National Hospital, Nairobi: A cross-sectional descriptive study. *Open Journal of Obstetrics and Gynecology*. 2018; 8(06): 610.
18. Azhar Z OO, Masud H. Disrespect and abuse during childbirth in district Gujrat, Pakistan: A quest for respectful maternity care. *Annals of Global Health*. 2017; 83(1): 1-9.
19. Bhattacharya S SRT. Silent voices: institutional disrespect and abuse during delivery among women of Varanasi district, northern India. *BMC Pregnancy Childbirth*. 2018; 18(1): 338.
20. Agegnehu Bante KT, Berhanu Seyoumand Abera Mersha. Respectful maternity care and associated factors among women who delivered at Harar hospitals, eastern Ethiopia: a crosssectional study. *BMC Pregnancy and Childbirth*. 2020; 20: 86.
21. Anteneh Asefa DB. Status of respectful and non-abusive care during facility-based childbirth in a hospital and health centers in Addis Ababa, Ethiopia. *BMC*. 2015; 12(s12978-015-0024-9): 33.
22. Ashenafi Mekonnen GFaAE. Disrespectful and abusive maternity care during childbirth in Bale zone

- Public Hospitals, southeast Ethiopia. clinical practice. 2018;16(5): 1273-1280.
23. Stephanie AKL, P. etai Community and health system intervention to reduce disrespect and abuse during childbirth in Tanga Region, Tanzania: A comparative before-and-after study. *PLOS Medicine*. 2017; 14(7): e1002341.
 24. Biresaw Wassihun LD, Nadia Woreda, Teklemariam Gultie. Prevalence of disrespect and abuse of women during child birth and associated factors in Bahir Dar town, Ethiopia. *Epidemiol Health*. 2018; 40: e2018029.
 25. Bowser D HK. Exploring the evidence for disrespect and abuse in facility-based childbirth. USAID TRAction Project, Harvard School of Public Health. 2010.
 26. Ephrem D. Sheferaw EB, Hannah Gibson. Respectful maternity care in Ethiopian public health facilities. *Reproductive Health*. 2017; 14: 60.
 27. Ephrem D. Sheferaw TZMaSBW. Development of a tool to measure women's perception of respectful maternity care in public health facilities. *BMC Pregnancy and Childbirth* 2016; 16: 67.
 28. Bowser D HK. Exploring evidence for disrespect and abuse in facility-based childbirth. USAID-TRAction project, Harvard school of Public Health. 2010.
 29. Biresaw W SZ. Compassionate and respectful maternity care during facility based child birth and women's intent to use maternity service in Bahir Dar, Ethiopia. *Pregnancy and Childbirth*. 2018; 18: 294.
 30. David Sando, Hannah Ratcliffe, Kathleen McDonald2,etai. The prevalence of disrespect and abuse during facility-based childbirth in urban Tanzania. *BMC Pregnancy and Childbirth*. 2016; 16(1): 1-10.
 31. Ogunlaja AO FO, Ogunlaja IP , Popoola G ,etai. Disrespect and Abuse during Maternity Carein South West Nigeria. *Rwanda Medical Journal*. 2017; 74(3): 1-9.
 32. Ahmed Siraj WTaHH. Prevalence of disrespect and abuse during facility based child birth and associated factors, Jimma University Medical Center, Southwest Ethiopia. *BMC Pregnancy and Childbirth*. 2019; 19(1): 1-9.
 33. Sando D, Ratcliffe H, McDonald K, Spiegelman D, Lyatuu G, Mwanyika-Sando M, et al. The prevalence of disrespect and abuse during facility-based childbirth in urban Tanzania. *BMC Pregnancy and Childbirth*. 2016; 16(1): 236.
 34. Andrea Solnes Miltenburg SvP, Tarek Meguid & Johanne Sundby. Disrespect and abuse in maternity care: individual consequences of structural violence. An international journal on sexual and reproductive health and rights. 2018; 26(53): 88-106.
 35. Anteneh Asefa DB. 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(33): 1-9.
 36. Biresaw W, Shegaw ,Zeleke. Compassionate and respectful maternity care during facility based child birth and women's intent to use maternity service in Bahir Dar, Ethiopia. *BMC Pregnancy and Childbirth*. 2017; 18(1): 1-9.
 37. Charlotte Warren RN, Timothy Abuya, Charity Ndwiga, Grace Maingi, Jane Serwanga,etai. Study protocol for promoting respectful maternity care initiative to assess, measure and design interventions to reduce disrespect and abuse during childbirth in Kenya. *BMC Pregnancy and Childbirth*. 2013; 13: 21.
 38. Reena Gupta SO, Lolade Mtimuni, Angella Rashidi, Tambudzai Kachale. The prevalence of disrespect and abuse during facility-based maternity care in Malawi: evidence from direct observations of labor and delivery. *Reproductive Health*. 2017; 14(1): 111.