Reducing Disrespect and Abuse of Women During Antenatal Care and Delivery Services at Injibara General Hospital, Northwest Ethiopia: A Pre–Post Interventional Study

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Introduction: Disrespect and abuse during pregnancy and childbirth continue to be a barrier for the utilization and quality of care in maternal health services. This study was therefore aimed at reducing the disrespect and abuse of mothers during antenatal care and delivery services at Injibara general hospital, northwest Ethiopia.

Materials and Methods: A pre–post interventional mixed method design was conducted among a total of 738 randomly selected mothers who attended antenatal care and delivery services from November 1, 2018 to May 20, 2019. To collect the data, exit interview using an interviewer-administered structured questionnaire was used. Provision of training, preparation of standard written guidelines and protocols, waiting room construction, availing screening or curtain, equipment, essential drugs and supplies, supportive supervision and mentoring, and staff motivation were the lists of interventions applied to decrease disrespect and abuse. Descriptive statistics and independent t-test were computed. The independant t-test is used because the study populations at the baseline and endline were different. A p-value of <0.05 and a mean difference with 95% CI was used to test the significance of the interventions.

Results: The study revealed that disrespect and abuse during pregnancy and childbirth decreased from 71.8% at baseline to 15.9% at the end-line with a 55.9% change (mean difference: 0.56, 95% CI: 0.55–0.57). Alongside, the magnitude on the subscales of disrespect and abuse (physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination and neglected care) was decreased at post-intervention, compared with the baseline.

Conclusion: Respectful maternal healthcare after the intervention was significantly improved. The finding suggests that provision of training to healthcare providers, written policies and procedures that describe the responsibilities of healthcare providers in the respectful maternal care process, improving facility infrastructure, availing supplies, regular supportive supervision and mentoring and motivation of high-performance employees have the potential to enhance respectful maternal care. Therefore, incorporating such training into pre-service curricula and in-service training of healthcare workers may indorse the practice of respectful maternal care.

Keywords: disrespect, abuse, pregnancy, delivery, intervention, Ethiopia

Introduction
Disrespect and abuse during pregnancy and childbirth at the health facilities are documented as a global problem, but worse in low-income countries such as
Ethiopia. Such disrespect and abuse not only violate women’s rights to compassionate and respectful maternity care, but it can also threaten women’s rights to life, health, bodily integrity, and freedom from discrimination. It is one of the most important barriers to maternal service utilization, quality of care problems, and often a violation of women’s human rights. However, it received less attention as compared to other more commonly recognized barriers such as access and financial obstacles of maternal care during childbirth.

Disrespect and abuse (D&A) during childbirth determine the quality of maternal care and it is one of the indicators of a violation of women’s basic human rights. It includes both the behavior of healthcare providers and structural deficiencies from human rights standards of good quality care or recommended professional practices. Scholars classify facility-based D&A into seven categories: physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination, abandonment of care, and detention in facilities.

Although much has been done to ensure access to health services, in Ethiopia a lack of quality services and low utilization of maternal health services continues to be a challenge. Every year, One of 52 mothers has a chance to die from pregnancy and childbirth related problems. Delays in seeking care, delays in transport to facilities and delay in providing services inside facilities contribute for these maternal deaths. Although the direct maternal services are offered free of charge, a limited number of skilled staff, inadequate essential drugs and supplies to health facilities and disrespect or humiliation of women by healthcare providers after reaching health facilities also hinder the use of maternal care.

In Africa, the prevalence of D&A ranges from 13.9% in Malawi to 98% in Nigeria. Similarly, studies in different parts of Ethiopia on the issue reported a high prevalence, ranging from 36–98.9%.

Disrespect and abuse are universal maternal health care utilization problems. However, it is unspoken that has been attributed to courtesy bias where women do not tend to report D&A while still in the health facility. In some cases, policymakers, program managers, and care providers are unaware of the disrespect and abuse experienced in their settings or the settings they are responsible for. In other cases, the people entrusted with women’s care and their newborns may recognize a need for respectful maternal care (RMC) but may feel ill-equipped to address the need. The lack of legal and ethical foundations to address D&A, lack of leadership in this area, lack of standards and accountability, provider prejudice due to lack of training and resources, and normalizing disrespect and abuse may contribute to this experience.

The provision of compassionate and respectful maternal care during pregnancy and childbirth has become one of the key components of improving the quality of maternity service, to reduce maternal mortality and morbidity and to meet the Sustainable Development Goals (SDGs) of reducing maternal mortality ratio (MMR) to 70 per 100,000 live births. There are however rare interventional studies in Ethiopia on how to reduce disrespect and abuse. Hence, this study aimed at improving respectful maternal care through simple interventions. The information generated from this study will provide managers to design appropriate strategies to address women’s disrespect and abuse during Antenatal Care (ANC) and delivery services.

Materials and Methods
Study Design and Setting
A pre–post interventional mixed-method (quantitative and qualitative) design was conducted at Injibara general hospital, to reduce D&A during pregnancy and childbirth from November 1, 2018 to May 20, 2019.

Injibara general hospital is located in northwest Ethiopia, which is 144 and 450 kilometers far from Bahirdar (the capital city of Amhara National Regional State) and Addis Ababa, respectively. The hospital provides outpatient, inpatient, adult and neonatal intensive care unit, surgery and other diagnostic and laboratory services for around 1.2 million catchment population in Aw信息发布。它有总数为300万的四个卫生机构，和107个医疗中心和185个卫生机构。母亲们如果做产前护理的话可以跟进和分娩服务，从11月1日到10, 2018年为pre–intervention和从1月1日到2019年10月1日为post–intervention，11月1日在InjibaraGeneralHospital中被包括在内。干预措施被提供从11月11日开始，到2019年4月30日。孕妇和付出的母亲们谁不能沟通和没有思想的被采访者被排除在采访外。

Root Causes Analysis and Selection of Interventions
The identification and selection of root causes and interventions to reduce D&A during antenatal care and delivery
services at the hospital were undertaken through a participatory approach of a multidisciplinary team. The multidisciplinary team consisted of the senior hospital management team, midwifery department coordinator, ANC focal person, gynecologists, hospital quality officer, plan and program officer, health management information system (HMIS) officer.

Initially, structured group discussions and interviews were conducted with senior midwiferies, gynecologists and a quality assurance officer. Observation was also made in the labour-delivery and ANC clinics, and empirical evidence reviewed. The fishbone diagram was then used as a method of root cause analysis to extract the possible root causes of D&A of pregnant and labouring mothers at the point of care. 35 We use the fish-bone diagram as a root cause analysis tool because it is more suitable to identify multiple root causes of problems with different themes/perspectives at the same time. 35 Then in our interventional study, the possible root causes of poor respectful maternal care were thematized under people (Knowledge, skills, feedback, motivation, support ...), policy and procedure (guidelines, rules, regulations ...), Medical equipment and supply (eg delivery coach, ultrasound, ...), and environment (internal and external) related factors.

Accordingly, poor monitoring and evaluation systems, poor knowledge and skill of staff towards respectful care and poor provider motivation were identified as possible root causes related to people. Under the medical equipment and supply related theme, the absence of some required medical equipment (eg ultrasound, blood pressure apparatus, delivery coach ...) and absence of certain essential drugs and supplies for the provision of maternal health services were identified as possible root causes. Whereas, the policy and procedure-related root causes were unavailability of written policies that describe the responsibilities of healthcare providers in the respectful maternal care process, absence of written professional code of conduct and ethics for health care providers at the labour wards and ANC clinic, a poor system for reporting illegal, incompetent or impaired practices. Moreover, poor infrastructure, poor working environment and poor support from the regional health bureau were the identified environment-related possible root-causes for low respectful maternal care at Ingibara general hospital.

Subsequently, identification and selection of proposed interventions were made that might address those identified root causes, and the proposed intervention was prioritized by evaluation criteria. The criteria used were: effectiveness/impact (how much will it decrease the problem), time (how long will it take to work), feasibility (is there capacity/stakeholder support/will the culture accept it), and cost (how expensive is the intervention to carry out). 36,37 These criteria were chosen to prioritize the interventions because they were the most suitable criteria as it provides a structured approach for comparison and selection of best interventions that help to overcome the stated problem. 36 Each criterion was measured by using a five-point Likert scale (from one to five) and the highest scores were considered as the best intervention to reduce D&A during pregnancy and childbirth. The overall interventions were presented and well-defined using the logical framework matrix (Table 1).

After that, training to healthcare providers on Compassionate Respectful and Caring (CRC) with strong attention to respectful maternal care to improve the knowledge and practice of staff towards respectful care was chosen as the primary intervention. Preparation of written guidelines and protocols describing the responsibilities of healthcare providers in the respectful maternal care process was chosen as a secondary intervention. Improving facility infrastructure (eg establishing waiting room for pregnant and labouring mothers, family member/support person, avail screens or curtain to maintain privacy and sufficient space to walk around, bathroom and toilet with a door that is accessible and has a handwashing sink with soap and water for both labouring and pregnant mothers); availing all the required equipment, essential drugs, and supplies for maternal health service provision; establishing regular monitoring and evaluation practice through supportive supervision and mentoring and recognizing for good performance employees were the other subsequent intervention chosen to improve RMC at Ingibara general hospital.

Interventions
A total of one hundred thirty-three health care providers and supervisors (midwives, case managers, coordinators, porters, medical record unit coordinators and liaison officers) working in the hospital had undergone a five-day training in collaboration with the University of Gondar and Amhara National Regional State Health Bureau, including modules on patient-centered care; respectful maternal care, planning, monitoring, and implementation of CRC; client-provider interaction; facilitation of patients’ and families’ participation in decisions and care; and communication with teams and health care ethics.
**Table 1 Log Frame Matrix for Reducing Disrespectful and Abuse of Maternal Care Among Labouring and ANC Follow-Up Mothers at Injibara General Hospital, Northwest Ethiopia, May 2019**

| Description of the Interventions | OVI | Data Sources | Assumptions |
|----------------------------------|-----|--------------|-------------|
| Goal: Improving maternal health care service utilization | Number of Maternal health services utilized (ANC, Delivery, PNC, FP) | DHIS2 reports, KPI reports, EHSTG report, Registrations of maternal health services | If the trained professional stay at the hospital and work as to the standard |
| Objective: Reducing disrespectful and abusive maternal care | The proportion of mothers who received respectful maternal care | Respectful maternal care survey checklist | If all the required equipment, essential drugs, and supplies are sustained |
| Strategies: (I) Training to health care providers | Number of healthcare providers who received CRC training | HRIS staff training profile |
| (II) Improving facility infrastructure | Number of RMC trained health worker | Observation and inventory of tangible resources |
| (III) Strengthening monitoring and evaluation system through supportive supervision and mentorship | Availability of waiting room for pregnant and labouring mothers | IFRR (Intra facility report and request) form |
| (IV) Establishing motivation mechanisms for high performer employees | Availability of enough screens or curtain | Supportive supervision and mentoring checklists |
| | Availability of all the required equipment, essential drugs and supplies for maternal health service provision | |
| | Number of supportive supervision and mentorship on RMC conducted | |
| | Number of written feedbacks provided after the mentorship | |
| | Number of employees selected as best employee of the month/rewarded | |

Activities
- Communicating and preparing training materials in collaboration with ARHB and UoG
- Purchasing and prepare the same training materials
- Providing the training on RMC
- Preparing written policies and procedures that describe the responsibilities of healthcare providers in the RMC process
- Prepare and provide a written code of ethics for providers
- Purchasing equipment, essential drugs and supplies;
- Develop TOR on regular supportive supervision
- Perform the regular supportive supervision and mentorship
- Conduct a discussion with staff and provide written feedbacks after a mentorship
- Develop TOR on motivation strategies for high-performance employees
- Motivate high-performer employees on monthly bases.

Abbreviations: ARHB, Amhara Regional Health Bureau; ANC, antenatal care; EHSTG, Ethiopian Hospitals Standards Treatment Guideline; CRC, compassionate respectful and caring; FP, family planning; HMIS, Health Management Information System; KPI, key performance indicators; OPD, outpatient department; OVI, objectively verifiable indicators; PNC, postnatal care; RMC, respectful maternal care; TOR, term of reference; UoG, University of Gondar.

The hospital established one waiting room with eight beds equipped with mattresses, a television, private bathroom, toilet, and maternal reception room with food services for those mothers who came for delivery by integrating it with the hospital’s inpatient department. Furthermore, a sufficient number of screens or curtains were availed to maintain the privacy of mothers during service provision. Written guidelines and protocols describing the responsibilities of nursing/midwifery for the nursing/midwifery process including the admission assessment, planning, implementation and evaluation of nursing/midwifery care were prepared by the senior midwiferies and the quality assurance team and approved by the senior management body of the hospital. Moreover, all essential drugs and supplies for the provision of maternal health services were satisfied; the monitoring and evaluation system through supportive supervision and mentorship were established. At the
same time, a protocol for recognizing high-performing employees was developed by the hospital human resource management team in collaboration with the quality assurance team. All these interventions were worked-out with the involvement and promises of the healthcare providers.

Regarding supportive supervision and mentoring activities, supervisors conduct monitoring and evaluation activities every two weeks using specially designed mentorship checklists developed by the quality assurance team in collaboration with the labour and delivery department of the hospital. In the six months intervention period from December to May 2019, they missed only one supervision and mentorship. The mentorship tool had a structured questionnaire on the RMC practice and a request box for feedback. The supervisors interviewed six mothers from the labour ward and three mothers from the ANC follow-up clinic. Then a discussion was held with the project investigator, the quality assurance team and healthcare providers working at both service points about the findings of mentorship and pursue suggestions for future improvements in RMC.

Outcome Measure

Primary Outcomes (Process Measures)
The availability of written policies, protocols and monitoring and evaluation guidelines for improving RMC practice, the number of trained healthcare providers and supervisors, number of stockout report on essential drugs and supplies for the provision of maternal healthcare services, the availability of separate waiting rooms for labouring and ANC follow-up clients, availability of screens or curtain in sufficient number, the number of supportive supervisions and mentorship conducted, availability of mentorship written feedbacks provided to delivery and ANC follow-up service units, number of recognized high performer employees in each month by the end of May 2019 were the process measures.

Secondary Outcomes (Outcome Measures)
The proportion of disrespect and abuse among pregnant and labouring mothers was the outcome measure.

Variables and Measurements

Disrespect and Abuse
Was defined as any form of inhumane treatment or uncaring behavior toward a woman during labour and delivery that is related to any of the seven categories of mistreatment listed as physical abuse, non-consented care, non-confidential care, non-dignified care, abandonment, or denial of care, discrimination and detention in facilities. It is measured by a total of 24 questions with dichotomous (Yes/No) response adapted from a landscape analysis by Bowser and Hill to explore evidence for disrespect and abuse in facility-based childbirth. If a woman responded any yes from the total questions considered as “abused or mistreated”; otherwise considered as “not abused or mistreated”.

Physical Abuse
Physical force or abrasive behavior with the woman, including slapping or hitting and touches measured using seven criteria. A woman who answers yes to at least one criteria was considered as being abused at the time of labour and delivery.

Non-Consented Care
The absence of informed consent, or patient communication, forced procedure, measured using seven criteria. A Women who answer yes to at least one criteria was considered as being abused at the time of labour and delivery.

Non-Confidential Care
Lack of confidentiality and lack of privacy during maternal care measured using two criteria. A woman who answers yes to at least one of the criteria was considered as being abused at the time of labour and delivery.

Non-Dignified Care (Including Verbal Abuse)
Lack of dignity, respect and intentionally humiliating, scolding, or shouting at patient’s value and for women; measured using two criteria. A woman who answers yes to at least one of the criteria was considered as being abused at the time of labour and delivery.

Discrimination
Lack of equitable care measured using two criteria. A woman who answers yes to at least one criteria was considered as being abused at the time of labour and delivery.

Abandonment or Denial of Care
Lack of right to timely healthcare and to the highest attainable level of health, measured using three criteria, and a woman who answers yes to at least one of the criteria was considered as “abused at the time of labour and delivery”.

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Women Development Army (WDA)
A women-centered voluntary community strategy to support and own primary health care activities in the community, particularly maternal health services. Members of the WDA are organized by the neighborhood. 25–30 women are organized with a leader in the army and five to six sub-groups with five to six members are formed within it. The WDA is expected to hold weekly discussions among members on health needs, to monitor and support pregnant women to ensure the continuum of care from pregnancy to postnatal, and to support the referral system to health care facilities. 38,39

Sample Size and Sampling Procedures
The sample size was determined by using a single population proportion formula \( n = (Z \alpha /2)^2 * P (1-P)/(d)^2 \) with the assumptions of 95% confidence level (CI), 5% margin of error, the proportion of disrespect and abuse 66.7% from a study conducted at Bahirdar health facilities among mothers during childbirth and 10% for non-response rate, which yields 374. Then, a total of 748 mothers were interviewed for pre- and post-intervention (374 for each) assessment. Moreover, a total of ten key informants (three health care providers, four women development army leaders, and three mothers with at least three ANC visits in the hospital) were involved. The samples were proportionally allocated to the ANC and delivery ward, based on the past three-months hospital average client flow reports. Then, a systematic random sampling technique was employed to obtain the calculated samples from ANC and delivery wards. For the qualitative part; key informants were selected purposively based on their special characteristics such as knowledge, status, communication skills and value for the community under study.

Data Collection Tools and Procedures
A pre-tested interviewer-administered structured questionnaire was used for the quantitative data collection. To ensure consistency, the questionnaire was first developed in English and translated into the local languages (Agew and Amharic) and finally back to English. A total of four non-clinical staff data collectors from the hospital’s antiretroviral therapy clinic and one supervisor were recruited and two days of training were provided before the data collection.

For the qualitative part data were collected through face-to-face interviews using a semi-structured interview guide. The principal investigator designed the guiding questions by considering existing literature on respectful and abusive maternal care, and also reviewed by experts in maternal care. The interviews were conducted by senior midwives from the Injibara health center. The interviewer was trained by the principal investigator in the use of the guide and probing for more detail on disrespectful maternal care. The interview was conducted in the local languages, Amharic or Agew at venues convenient to the participant, and took an average of 20 minutes. During each interview audio-records and field notes were taken with the participants’ consent.

Data Quality Control
Before data collection, two days of training was provided to data collectors and supervisors on the basic techniques of data collection and supervision. Supervisors checked data accuracy, consistency, and completeness daily. The pre-test (5% of sample size) was done at the Injibara health center (one of the nearby health facilities with similar characteristics) by the same data collectors. Moreover, to assure the quality of qualitative data, data was collected by experienced data collectors (several years of experience as a midwife). The credibility of the data was determined through triangulation of data between methods of data collection. Recruitment of appropriate key informants was considered, and the participants’ voice was inserted in the result to check its accuracy.

Data Management and Analysis
After appropriate coding, the quantitative data was entered into Epi Info version 7 software and exported to SPSS version 23 software for analysis. Frequencies, proportion and summary statistics were used and the results were presented in narrations, figurative and tabular forms. An independent \( t \)-test was done to assess the significance of the intervention. A P-value of < 0.05 and a 95% confidence level (CI) was used to declare the significance of the intervention. The recorded qualitative interviews were transcribed verbatim and translated from Agew or Amharic into English by the first author and local translators. The data collectors also carried out the translations to ensure the original meanings conveyed by the participants were fully captured. Data management and analysis were done using Open Code 4.03 software. The data were coded based on preset categories developed from the literature.
for thematic analysis. The first and last author independently analyzed the data, the third author confirmed this, and the second author validated it. The data was analyzed and presented using thematic analysis in the non-physical abuse, respectful care, consented care, confidential care, abandonment or denial of care, and dignified care themes to complement the quantitative findings.

Ethical Considerations
Ethical approval was obtained from the Ethical Review Committee of the Institute of Public Health, the College of Medicine and Health Sciences of the University of Gondar (Ref: No: IPH8375/06/19). Official letters were received from the Amhara National Regional State Health Bureau and Injibara general hospital prior to contacting the study participants. Full information was given to participants on the purpose and significance of the study. The informed and written consent was then obtained from all participants. We use thumbnails to get consent from those respondents who could not able to read and write. Confidentiality of the information obtained from the participants was maintained by using code numbers instead of personal identifiers and by keeping the questionnaire locked. The written informed consent included consent for the publication of anonymized responses. Finally, the study was carried out in accordance with the Helsinki Declaration.

Results
Socio-Demographic Characteristics of the Respondents
A total of 738 mothers was interviewed in the pre- and post-intervention with a response rate of 98.6%. The majority of the study participants were greater than 25 years old. Nearly ninety-one and ninety four percent of the mothers who participated in the pre-and post-intervention were married, respectively. Regarding their educational status, 77.8% in the pre-intervention and 85% in post-intervention were unable to read and write. Monthly income level was ranged in 1000–3000 Ethiopian Birr (ETB), 55% and greater than 3000 Ethiopian Birr (48%) in post-intervention. Sixty-nine and sixty-six percent of rural dweller mothers have participated in the pre- and post-intervention, respectively. Orthodox Christians were the dominant religion with 89.3% and 88.3% in the baseline and end-line, respectively. A total of 70.6 and 67% of mothers were from Agew Ethnic in the pre- and post-intervention, respectively. Similarly, 65 and 78% of the mothers were housewives in the pre- and post-intervention, respectively (Table 2).

Disrespect and Abuse of Maternal Care
The overall magnitude of disrespect and abuse during pregnancy and childbirth in the study was 71.8 and 15.9% in the pre- and post-intervention, respectively. Similarly, the disrespect and abuse among labouring mothers were reduced from 78.5% at the pre-intervention to 27.7% at the post-intervention. Whereas disrespect and abuse among ANC follow up mothers were 64.7 and 36.2% in the pre- and post-intervention, respectively (Figure 1).

Table 2 Social-Demographic Characteristics of Study Participants at Injibara General Hospital, Northwest Ethiopia, 2019

| Variables           | Categories                  | Pre-Intervention (n=369) | Post-Intervention (n=369) |
|---------------------|-----------------------------|--------------------------|---------------------------|
| Age in years        | Less than 18                | 6 (1.6)                  | 6 (1.6)                   |
|                     | 18–25                       | 179 (48.5)               | 176 (47.7)                |
|                     | >25                         | 184 (49.9)               | 187 (50.7)                |
| Marital status      | Married                     | 335 (90.7)               | 348 (94.3)                |
|                     | Unmarried                   | 34 (9.3)                 | 21 (5.7)                  |
| Monthly income in   | Less than 1000              | 5 (1.4)                  | 7 (1.9)                   |
| Ethiopian Birr      | 1000–3000                   | 307 (83.2)               | 203 (55)                  |
|                     | Greater than 3000           | 57 (15.4)                | 159 (43.1)                |
| Education           | Unable to read and write    | 289 (78.3)               | 313 (84.8)                |
|                     | Able to read and write      | 80 (21.7)                | 56 (15.2)                 |
| Occupation          | Housewives                  | 243 (65.8)               | 287 (77.8)                |
|                     | Governmental employers      | 95 (25.7)                | 23 (6.2)                  |
|                     | Others*                     | 31 (8.4)                 | 59 (16)                   |
| Residence           | Rural                       | 254 (68.8)               | 244 (66)                  |
|                     | Urban                       | 115 (31.2)               | 125 (33.9)                |
| Religion            | Orthodox                    | 331 (89.7)               | 326 (88.3)                |
|                     | Muslim                      | 30 (8.1)                 | 26 (7)                    |
|                     | Protestants                 | 8 (2.2)                  | 17 (4.7)                  |
| Ethnicity           | Agew                        | 261 (70.7)               | 247 (67)                  |
|                     | Amhara                      | 104 (28.2)               | 108 (29.3)                |
|                     | Others**                    | 4 (1.1)                  | 14 (3.8)                  |

Notes: *Students, Merchants and Private/daily employers. **Gumuz, Tigray.
The findings from the key informants highlighted that there was an improvement in respectful care from health care providers in the hospital. Most of the key informants explained that they were glad by the good respect of the healthcare providers especially midwives. However, few of them described that there is still some problem in respecting clients especially in providing informed consent.

“Midwives value their clients not to hurt them physically, but some of their assistants talk to their clients unethically and treat them violently”. (A 24 years old male health care provider)

Most of the key informants agreed that there were good changes in respectful care during service provision compared to the past year. A 32-year old health care provider said that “This is an interesting circumstance to see a new situation in terms of clients that have not been seen in my career as a medical service provider over the last 6 months “. Similarly, A 43 year’s old women development army leader strengthens the idea “Many of the health workers in the ANC and labour ward are good, and we feel comfortable seeing and engaging with them”. Even though, the key informants did not deny the ethics of rare healthcare worker staff might need improvements.

“… even if there are changes in respectful care, there are still some midwives who behave unethically when providing services, and I encourage them to take lessons from their peers and minimize their unethical act. As a result, the hospital will pay attention to improve the respectful maternal care in general and with the healthcare assistants and midwives in particular”. (51 years old male key informants)

“Midwives’ approach to clients is innocent with a smile and respects essential socio-cultural values and norms that make mothers feel like they are at home especially in the waiting room”. (A 29 years old male health worker)

Most participants described getting the first chance in central triage and card room and facilitators/porter’s service is very encouraging. Majorities agreed that service provided were exempted, privacy issue in ANC room was maintained, guards in delivery ward guiding for clients with courtesy and respect with a large number of clients. Two key informants expressed that;

Even if, there are positive changes in the delivery of compassionate maternal care services relative to the previous years’ service provision, there are still priority concerns in ultrasound and laboratory services and laboratory result release that should be resolved by senior hospital administrators to improve maternal care with a maximum of dignity.

In this study, physical abuse during maternal care was reduced from 61% at baseline to 15.4% at the post-intervention. In line with this, providers hit or slapped, culturally inappropriate way of carrying, not receiving necessary pain-relief treatment, denied from food or fluid in labour unless medically necessitated for labouring mother
only were decreased from the pre-intervention by 44.5, 50.9, 58.9 and 44.7%, respectively after the intervention.

Non-consented care was reduced by 54.9% from the pre-intervention. The provider did not explain what is being done, the provider did not give periodic updates on the status and progress of my labour/ANC visits, the provider did not permit me to choose of position for birth and ANC examination and provider did not obtain my consent or permission prior to any procedure were among highly reduced forms of non-consented care through our interventions. The qualitative part reinforces this finding. Some of the key informants react that clients had not been provided with necessary and adequate information about the above respectful maternal care and their maternal health conditions.

“… Clients have not been provided with accurate information on compassionate maternal care as basic human rights due to the lack of informed consent on what is to be done and the progress of labor and fetal conditions during labouring and also the progress of pregnancy as health professionals”. (A 31 years old female informant)

In addition to those, two of the key informants expressed that the method of information provision used has a problem of language and the clients have to go around repeatedly to get the room where they can get the services.

“The existing information provision is fine for those who can read and write but difficulty for the illiterates/unable to read because there are posters written in English and Amharic versions that are displayed at the service point “. (38 years old male key informant)

The Majority of the participants said that method of information provision for illiterate clients visiting the hospital is needed. Similarly, Non-dignified care was decreased by 53.6% after the implementation of designed interventions. Though providers shouting at or scolding on mothers was decreased, still, there was a significant experience of shout at service area which impacts negatively on dignity.

“midwives respect to their clients not to hurt them physically, but some of their assistants/students shout at clients unethically and made service them with a lot of frustration”. (A 24 years old male key informant)

Furthermore, Non-confidentiality care, discrimination care, and abandonment or denial of care were reduced from the baseline by 54.8%, 59.3% and 68.4%, respectively at the post-intervention (Table 3).

Significance of the Interventions
An independent t-test was used to test the significance of our intervention. Accordingly, the significance of the intervention was checked for the overall disrespect and abuse care as well as to each category of the disrespect and abusive maternal care. Subsequently, the intervention has significant changes at p-value <0.0001. Among components of disrespect and abusive care highest changes were observed for physical abuse (mean difference: 0.73, 95% CI: 0.67–0.77), and lower change in the confidentiality care domain (mean difference: 0.48, 95% CI: 0.41–0.54). The overall disrespect and abuse have shown a significant change with (mean difference: 0.56, 95% CI: 0.55–0.57) (Table 4).

Discussion
This pre–post interventional study revealed that women’s disrespect and abuse during antenatal care and delivery services at Injibara general hospital was reduced by 55.9% (71.8% at baseline to 15.9% at end-line). The findings suggest the provision of training to healthcare providers, written policies and procedures describing the responsibilities of healthcare providers in the respectful maternal care process, improving facility infrastructure, availing all the required equipment, essential drugs and supplies, regular supportive supervision and mentoring and motivating the employees has the potential to decrease women’s disrespect and abuse during antenatal care and delivery services.

In this study, the magnitude of disrespect and abuse at the post-intervention was consistent with those of studies conducted in Tanzania, Kenya and Malawi among women during childbirth.24,31,40 However, it is much lower than the result of studies done in Ethiopia public health facilities among women during childbirth in Addis Ababa, Arbaminch town and Shambu town in the Wolega zone.27,30,41 Additionally, our finding is lower than the finding of other similar studies.42,43 These differences could have resulted from the difference in study setup, study design as well as the socio-cultural difference of the study participants, moreover, the interventions that were implemented in our study may contribute to these differences.

In this study, the highest change was observed in the domain of abandonment or denial of care. It was decreased from 80% at baseline to 11.6% at the end-line, resulting in a decrease of 68.4%. The possible reason for this
Table 3 Magnitude of Disrespect and Abuse of Women with Their Respective Categories During Delivery and ANC Services at Injibara General Hospital, Northwest Ethiopia, 2019

| Variables | Pre-Intervention | Post-Intervention |
|-----------|------------------|-------------------|
|           | n (%) *          | n (%) *           |
| **Experienced at least one form of D&A** | | |
| Physical abuse | | |
| The provider (s) physically hit or slapped, pushed, punched, or beat me | 265 (71.8) | 59 (15.9) |
| Health provider verbally insulting during labour/ANC | 225 (61.0) | 57 (15.4) |
| Separation of the mother from the baby without medical Indication | 212 (57.5) | 48 (13.0) |
| Support staffs insult me and my companion | 205 (55.6) | 49 (13.2) |
| Demonstrating the caring culturally inappropriate way | 218 (59.0) | 63 (17.0) |
| Necessary pain-relief treatment is not provided | 228 (62.0) | 93 (25.2) |
| Denied from food or fluid in labour unless medically necessitated | 228 (62.0) | 41 (11.1) |
| **Non-consented care** | | |
| The provider did not introduce themselves to me and my support person | 258 (72) | 63 (17.1) |
| Providers did not encourage me to ask questions | 232 (63) | 66 (17.8) |
| The provider did not respond to my question with politeness | 243 (66) | 67 (18.1) |
| The provider did not explain what is being done and what to expect throughout labour, birth and ANC follow up | 220 (59.6) | 58 (15.7) |
| The provider did not give periodic updates on the status and progress of my labour/ANC visits | 265 (72.0) | 56 (15.1) |
| The provider did not permit me to choose of position for birth and ANC examination | 257 (69.6) | 41 (11.1) |
| The provider did not obtain my consent or permission before any procedure | 228 (62.0) | 64 (17.3) |
| **Non-confidential care** | | |
| Providers did not use drapes or covering to protect my privacy | 293 (79.5) | 91 (24.7) |
| Providers discussed my private health information in a way that others could hear | 294 (79.7) | 100 (27.1) |
| Non-dignified care (including verbal abuse) | 283 (79.4) | 82 (22.2) |
| Health providers shouted at or scolded me | 288 (78) | 90 (24.4) |
| Health providers made negative comments about me | 278 (75.3) | 83 (22.4) |
| **Discrimination care** | | |
| Providers discriminated me by race, ethnicity and economic status | 299 (81.0) | 70 (18.9) |
| Providers discriminated me because of teenage | 289 (79.7) | 82 (22.2) |
| **Abandonment or denial of care** | | |
| Provider ignored me or did not come quickly when I called him/her | 258 (69.9) | 39 (10.6) |
| Provider left me alone or unattended during the second stage of labour | 263 (71.2) | 43 (11.6) |
| No right to timely healthcare and the highest attainable level of health | 253 (68.5) | 32 (8.8) |

Note: *Number of respondents who answered “yes” for the questions.

Abbreviations: ANC, antenatal care; D&A, disrespect and abuse.

achievement is that the respectful maternal care training undertaken in this study has an emphasis on the right to timely healthcare (reduction of waiting times and sometimes harmful delays) and the right to the highest attainable standard of health that can influence the practice of healthcare providers. Additionally, frequent supervision and mentorship with written feedbacks might contribute to this achievement.

The second highest post-intervention change was observed on the non-consented care domain and showed that 54.9% decrement from the pre-intervention. The post-intervention finding in this study was by far lower than a study conducted in Bahirdar, Arbaminch and Addis Ababa, Ethiopia.27,29,30 This better achievement can be explained by the interventions implemented in our study such as frequent supportive supervision, securing the necessary supplies and drugs, employee motivation mechanisms and the training provided to providers reduce non-consented care.

A substantial decremental change was also observed in discrimination care, non-dignified care and physical abuse sub-scales from baseline compared to the end-line. The
potential reasons are the training provided also underlined all the sub-dimensions of disrespect and abuse, including asking for consent before performing any procedure and respecting the preference of patients, discrimination by race, ethnicity, age and economic status while providing care. Besides, the roleplays in the training offer opportunity to discuss various elements of verbal and physical abuse. Furthermore, other interventions mentioned elsewhere contribute to this finding as well. Similar findings were also reported in some previous studies where training promotes respectful maternal care during pregnancy and childbirth.44,45

With regard to physical abuse, although there was a decremental change from pre- to post-intervention, 22.5% of respondents still reported that health providers/assistants were shouting or scolding during pregnancy and childbirth. Reports from other nations support this finding. In Ghana, from a qualitative study, Midwives witnessed that provision of inadequate care; and verbal, physical, and psychological abuse of women during childbirth at midwifery units of their working health facilities.46

The other categories of disrespect and abuse during pregnancy and childbirth were non-dignified care and non-confidential care. Accordingly, 24.4% and 24.7% of mothers at the post-intervention reported non-dignified care and non-confidential care, respectively. This finding was lower than other studies done in Ethiopia.27,29,47 The possible explanation for the variation may be because of little attention given by health managers to secure supplies and resources required for maternal health provision in the previous studies. Additionally, poor infrastructure and unavailability of motivating strategies for employees from previous studies may explain the variation.

**Table 4** Independent t-test of the Intervention on Disrespect and Abuse of Women with Their Respective Categories During Delivery and ANC Services at Injibara General Hospital, Northwest Ethiopia, 2019

| Variables                        | df | Mean Difference (95% CI) |
|----------------------------------|----|-------------------------|
| Physical abuse                   | 736| 0.74 (0.67–0.77) *       |
| Non-consent care                 | 736| 0.56 (0.48–0.60) *       |
| Non-confidentiality care         | 736| 0.48 (0.42–0.54) *       |
| Non-dignified care               | 736| 0.54 (0.47–0.59) *       |
| Discrimination                   | 736| 0.69 (0.63–0.74) *       |
| Abandonment/neglected care       | 736| 0.60 (0.55–0.66) *       |
| Over all Disrespectful and abusive care | 736| 0.56 (0.55–0.57) *       |

Note: *Statistically significant at p-value <0.0001
Abbreviation: df, degree of freedom (n=2).

**Strength and Limitation of the Study**

Since the study was interventional, it provides an opportunity to implement identified strategies to improve respectful maternal care at the baseline study and thus shows the actual influence of the interventions on the outcome variable. Besides, the study was supported by a qualitative study which provides extensive and detailed information on D&A during maternity care. The possible limitation of the study was the use of a specific study area that might not include other factors such as variation of infrastructure across facilities that could affect the intervention, so it would be better to add more facilities to see the difference between the facilities through the interventions. This study also does not address some interventions such as shortage of staff. Furthermore, the absence of a comparison group will make it difficult to know whether the improvements observed were due to the fact that the staff at the facility know they are being assessed and other secular trends, or whether it is a real intervention effect.

**Conclusion and Lessons Learned**

In this interventional study, respectful maternal care at Injibara general hospital was found to be significantly improved. Alongside this: physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination and neglected care were decreased. The finding suggests that the provision of training to healthcare providers, written policies and procedures that describe the responsibilities of healthcare providers in the respectful maternal care process, improving facility infrastructure, availing supplies, regular supportive supervision and mentoring and motivating high-performing employees have the potential to improve respectful maternal care. Therefore, including such training into pre-service curricula and in-service training of healthcare workers may advance the practice of respectful maternal care. Similarly, healthcare facilities also need to implement the other interventions mentioned in this document for improving respectful maternal care services.

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Disclosure
All authors declared that they have no competing interest in this work.

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