ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCE

SCHOOL OF PUBLIC HEALTH

Assessment of Quality of Delivery Services at Public Health Institutions in Bishoftu Town, Oromia Region, Ethiopia

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Advisor: Dr Mitike Molla (Associate Professor)

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Public Health

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Declaration

I the undersigned declare that this is my original work has never been presented in this or any other University and that all the source materials used for the thesis have been duly acknowledged.

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Name	Dr Mitike Molla (Associate Professor)
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Acronyms

AA	Addis Ababa
AAU	Addis Ababa University
AMTSL	Active Management of Third Stage of Labour
ANC	Ante Natal Care
AOR	Adjusted Odds Ratio
BEmONC	Basic Emergency Obstetric and Neonatal care
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CI	Confidence Interval
EDHS	Ethiopia Demographic Health Survey
EmONC	Emergency Obstetric and Neonatal Care
ETB	Ethiopian Birr
FMOH	Federal Ministry of Health
HC	Health Center
HFs	Health Facilities
HMIS	Health Management Information System
HSTP	Health Sector Transformation Plan
MM	Maternal Mortality
MMR	Maternal Mortality Ratio
PPH	Post Partum Hemorrhage
QoC	Quality of Care
REC	Research Ethics Committee
RMC	Respectful Maternity Care
SDG	Sustainable Development Goal

SPSS	Statistical Package for Social Sciences
WHO	World Health Organization

Abstract

Background: Ethiopia is one of the countries with high maternal and prenatal mortality. Interventions targeted from pre-pregnancy to postnatal period had proved to have a positive effect on maternal and newborn outcomes. However, in Ethiopia, health facility delivery is very low only at 28%. Low quality of care in health facilities is one of the factors that contribute to the low service uptake in Ethiopia among other reasons. Though many had indicated the low service uptake for delivery services, there is a paucity of research about the quality of delivery services at public health facilities. Hence, this study was planned to assess the quality of delivery services in public health facilities of Bishoftu town using Donabedian frame work.

Objectives: To assess the quality of delivery services at public health institution in Bishoftu town, Oromia Region, Ethiopia

Methods: We used a mixed research method combining a facility based cross-sectional quantitative and qualitative studies in all public health facilities of Bishoftu town. The quantitative study was conducted among 254 clients who delivered at health facilities during the study period. All health providers (n=21) who attended women during labor, delivery, and in the immediate postpartum period have participated in the qualitative study. Availability of necessary resources for delivery services was identified using observation checklist. Data were entered and cleaned using Epi- Info version 3.5.3 and analyzed using SPSS version 21. Qualitative data were analyzed using thematic content analysis.

Result: Most of the health facilities didn't provide all components of basic emergency obstetric and newborn care signal functions. Mean percentage of respectful maternity care (39%) and knowledge of providers were low. Overall satisfaction of clients was 58.7%. Women who were at secondary level of education and above [AOR = 0.33, 95%CI: (0.12-0.96)], who had operative mode of delivery [AOR= 0.20, 95% CI: (0.08-0.47)], and whose newborn outcome was complicated [AOR= 0.04, 95% CI: (0.003-0.50)] were less likely to be satisfied with the delivery care they got from public health facilities. Women who had planned pregnancy [AOR= 3.24, 95% CI: (1.44-7.30)] were more likely to be satisfied with the services they obtained.

Conclusion and recommendation: Quality of delivery services was suboptimal which is explained by lack of Basic Emergency Obstetric and Neonatal Care signal functions. The low level client satisfaction could have resulted from the suboptimal services. Strengthing the BEmONC signal functions and training on respectful and compassionate care is important.

1. Introduction

1.1. Background

Globally, an estimated 303,000 maternal and 2.7million neonatal mortality were occurred in 2015. Almost all (99%) maternal and neonatal deaths occur in developing countries, with sub-Saharan Africa alone accounting for 66% and 38% of maternal and neonatal deaths respectively. According to global estimates for trends in maternal mortality from 1990 to 2015; the maternal mortality ratio (MMR) in Ethiopia by 2015 was 353/100, 000 live births (1, 2).

A lot of efforts have been made in developing countries including Ethiopia to prevent problems associated with maternal and neonatal deaths where major focus has been placed on improving access to skilled birth attendance and emergency obstetric care (3) . This has resulted in higher rates of births in health facilities. The proportion of deliveries reportedly attended by skilled health personnel in developing countries rose from 56% in 1990 to 68% in 2012 (4).

Despite increase in percentage of births delivered by a skilled provider in Ethiopia in 2016 from six percent reported in 2000 Ethiopia Demographic Health Survey (EDHS), health facility delivery is still very low only at 28% and maternal mortality is high at 412 maternal deaths per 100,000 live births (5). Though the new estimate shows progress still maternal mortality (MM) is way back from that of other countries (1).

Despite the fact that quality delivery service is essential for further improvement of maternal and neonatal health, the quality of delivery service is not well studied. Therefore, the objective of this study is to assess the quality of delivery services at public health facilities.

1.2. Statement of the Problem

Providing substandard maternal health service has damaging effect on the health outcome and subsequent utilization of the services. This is the country's major challenge to achieve the Sustainable Development Goal (SDG) target of reducing Maternal Mortality Ratio (MMR) to less than 70 per 100,000 and neonatal mortality to at least as low as 12 per 1000 live births in 2030 (3, 6).

In Ethiopia, different studies have pointed out that the quality of care falls below World Health Organization's (WHO) recommended standards (7-9). A study done on Quality of Care (QoC)

survey in 19 Ethiopian hospitals with the heaviest volume of deliveries shows suboptimal quality of care at all levels of hospitals and among all provider types (7). Studies conducted on Emergency Obstetric and Neonatal Care (EmONC) in Ethiopia indicated that the quality and availability of EmONC was well below recommended levels, which contributes to a level of maternal and neonatal mortality (8, 9).

Among factors that contribute to low service uptake poor QoC is one, and has been highlighted as a key factor to explain why women either do not access services at all, access them late, or suffer avoidable adverse outcomes despite timely presentation that has impact not only on maternal mortality at the facility-level, but also on maternal deaths in the community (10). According to Woreda health office health management information system report of 2015/2016; in Bishoftu town the proportion of skill birth attendant was 89.5%(11). But 78.2% of them were attended at Bishoftu Hospital that also serves all the communities from nearby woredas.

In Ethiopia few studies were conducted on quality of delivery service. There is no study that documented quality of delivery service at public health facilities based on Donabedian framework in Ethiopia in general and Oromia region in particular at Bishoftu town. Thus this study aims to assess quality of delivery services in public health facilities of Bishoftu town using Donabedian frame work. Accordingly the result of the study will be used by Federal Ministry of Health along with other stakeholders to strengthen the system and maintain quality of care of these units in Bishoftu and the country as large which could further contribute to reduce maternal and neonatal mortality and morbidity in Ethiopia.

2. Literature Review

Substandard quality of delivery service is key health system weakness (3). Study conducted in Butajira Ethiopia showed that factors influencing women's place of delivery were perceived poor quality of care that includes lack of privacy, inadequate resource, poor competence of health care providers and poor reception of laboring mothers (12).

2.1. Definition of Quality of Health Care and Framework

To improve the quality of delivery service an understanding of what is meant by the concept of quality of care is important. Quality of care has been defined by many, WHO defined quality of care as, "*the extent to which health care services provided to individual and patient populations improve desired health outcomes, In order to achieve this, health care needs to be safe, effective, timely, efficient, equitable, and people centered*" (13).

Institution of Medicine defines QoC as: "*Quality of health care is the degree to which maternal health services for individuals and populations increase the likelihood of timely and appropriate treatment for the purpose of achieving desired outcomes that are both consistent with the current professional knowledge and uphold basic reproductive rights*" (14) and Donabedian defined QoC as '*the application of medical science and technology in a manner that maximizes its benefit to health without correspondingly increasing the risk*' (15).

Quality of care is a multi-dimensional concept. Therefore, a framework with important domains of measurement and pathways to achieve the desired health outcomes is required to identify the action points to improve the quality of care. As such, several frameworks have been developed to operationalize its key dimensions (13, 14, 16).

WHO developed the QoC framework for pregnant women and newborns in health facilities within the context of the health system as the foundation. Health systems create the structure which enables access to quality of care and allows for the process of care to occur along two inter-linked dimensions of provision and experience of care and process enables outcome to occur at individual and facility level (17).

In 2000, Hulton et al. published a QoC framework for maternity services, which brought together key elements of quality. This framework subdivided quality into two interlinked dimensions of "provision of care" and "experience of care" consisting of 10 measurable elements of care (14).

Donabedian conceptualized QoC according to three dimensions: 1) "structure" referring to the settings where care is delivered that includes 'what facilities, equipment, staff etc. were there?'; 2) *process* implies 'what was done to the patient?'; and 3) "outcomes" referring to the impact of care on health status and the degree of client satisfaction, asks 'what was the result for the patient?'(15, 16). For this study Donabedian definition and framework is used to assess quality of care.

2.2. Essential Resources

A study done in Mali indicates many essential pieces of equipment and supplies were missing, and 67.7%of community health centers were lacking at least 1 of 14 essential drugs required for obstetric care. Regarding the infrastructure, 60.0% of health facilities had a number of beds considered as insufficient, 29.2% had no source of drinking water, 27.7% had no electricity, and 15.4% had no means of communication. The median travel time to the referral center was approximately 50 minutes (18).

A study done in Addis Ababa in 2013 on EmONC shows that, all the surveyed HCs had continuous water supply, reliable access to telephone, logbooks, partograph and 100%consistent supply of uterotonic drugs, antibiotic eye ointment and intravenous fluids while 50% had parenteral antibiotics and parenteral anticonvulsant (9).

A study done on quality of care at national level shows extremely low partograph use (13%) and information recorded was often incomplete. Among the signal functions, availability of anticonvulsant was very low (7).

2.3. Competency of Providers

Skilled attendance at every birth has been recognized as essential to reduce maternal and perinatal morbidity and mortality. The few studies that have been conducted have highlighted wide variations in knowledge and skills in developing countries. Studies done in Addis Ababa, Mali and systematic literature review in developing countries showed that there is low

competency of health workers. These studies reported insufficient competency, and ranging between 39%- 79.5%. This variation could be due to the method used for assessing competency and type of questions used for assessment. Such low scores on obstetric care was in diagnosis and management of hypertensive complications, postpartum infections, postpartum hemorrhage and birth asphyxia as well as poor skills in neonatal resuscitation (9, 18, 19).

A study done in Addis Ababa on current evidence on EmONC shows majority of the providers who participated have insufficient knowledge in diagnosing postpartum hemorrhage (PPH) and birth asphyxia as well as poor skills in neonatal resuscitation. and only 12% of the interviewed providers in 2013 and 16% in 2008 reported receiving in-service BEmONC training (9).Other study done on barriers for providing quality of service in relation to competency indicates insufficient pre-service and in-service training and absence of supportive supervision as key barriers to provision of quality emergency obstetric care (20).

A study done in Mali indicated that deficiencies in knowledge of EmONC and competency among primary healthcare workers with mean score of 66.7. Competency was most deficient for hypertensive complications and postpartum infections (18).

A qualitative study done in Butajira districts of South Central Ethiopia to assess the reasons why mothers in the study areas do not deliver in health facilities shows reasons that can be attributed to quality of care and client related factors. Health care system factors were poor competence and shortage of staff, poor reception, and refusal of admission, lack of privacy, information gap, and materials at health facilities (12).

2.4. Respectful Care

Among guiding principles for ultimate goal of the post-2015 maternal health strategy to end all preventable maternal mortality is applying a human rights framework to ensure that high quality maternal and newborn care is available, accessible, and acceptable to all who need it (21). Among human right respectful care is one.

The absence of respectful maternity care deters women from utilization of maternity care services (22-24). Components of respectful care include: friendly care, abuse-free care, timely

care, and discrimination-free care are the four main dimensions that represent the perception of RMC provision in the public facilities examined in Ethiopia (25).

Studies done in east and southern Africa including Ethiopia shows, the high level of disrespectful care during child birth. Insufficient communication and information sharing by providers as well as delays in care, abandonment of laboring women and not protected privacy are mentioned as deficiencies in respectful care (23, 24).

According to study done in A.A, among the prevalence of disrespectful and abuse during child birth the violating women's right to information, informed consent and choice or preference was the most (94.8%) and 21.4 % of respondents reported issues related to privacy, that service providers didn't use curtain or other visual barriers to protect them during child birth (24).

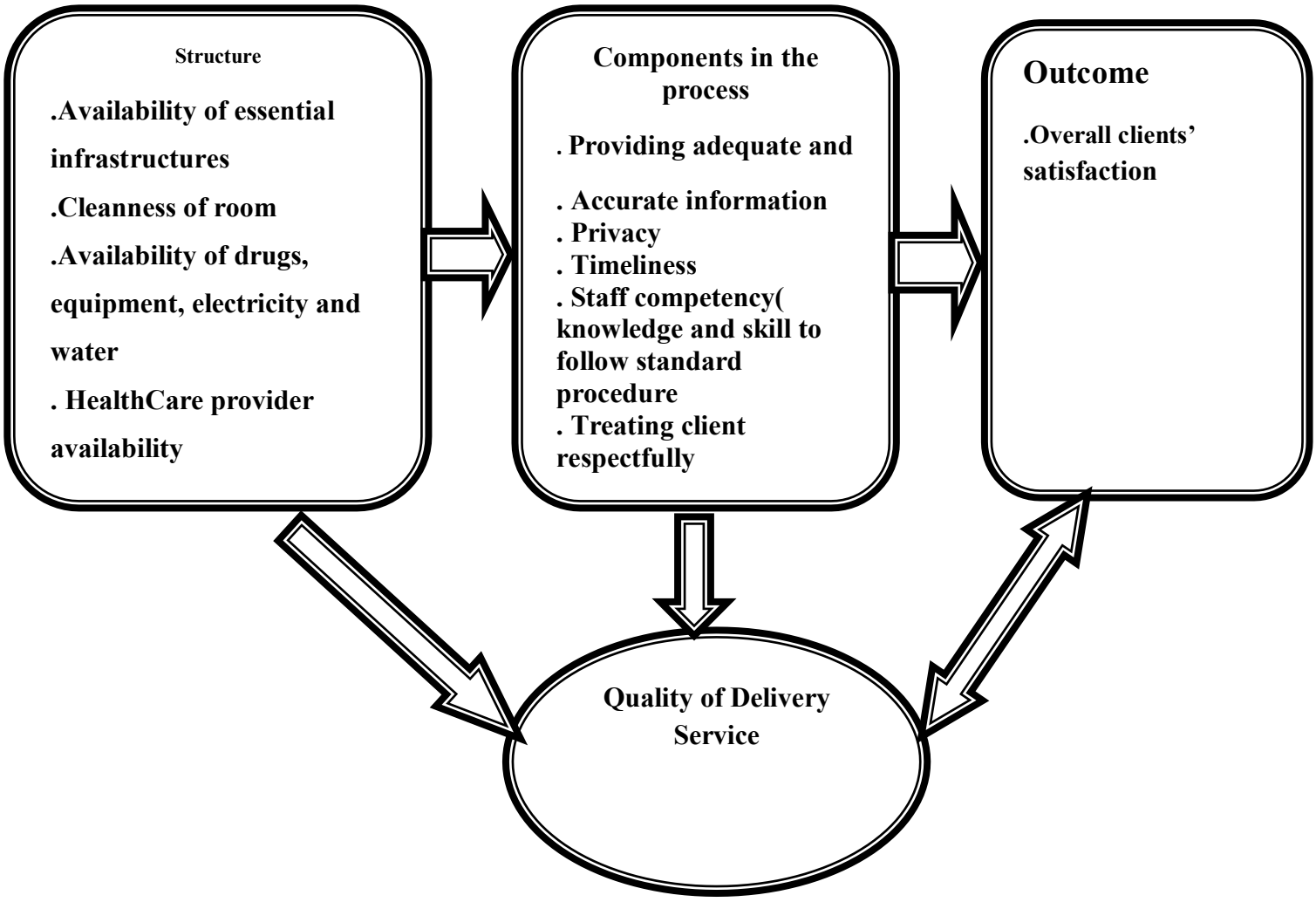
2.5. Overall Satisfaction

A study done in Assela, A.A, and Amhara region have shown that, overall maternal satisfaction considered as an output indicator of quality health care ranges between 2.4 and 80.7% (26-28).

A study done in Assela indicated overall maternal satisfaction level was 80.7%. Dissatisfaction was reported to be highest (42.3%) by cleanliness and access of toilet. The proportion of mothers who were completely satisfied with health care ranges between 2.4 to 21% (26). And that of A.A showed provider's communication with clients yielded complete satisfaction rates ranging between 0.7 to 26%. Inadequate information and explanation of procedures to be done to the client were found to be major causes of dissatisfaction. The complete satisfaction rate with environmental factor of the hospital was between 3.3 to 40.2% (27).

A study done on mothers' satisfaction with the delivery services provided at referral hospitals in Amhara Region, Ethiopia indicates, the proportion of mothers who were satisfied with delivery care were 61.9%. Women in this study reported to have different level of satisfaction with different service components they received from the health facilities. For example, 46.7% of women were satisfied by the privacy of the services; 51.4% were satisfied by the distance to the health facility and 52.7% were satisfied by the amount they paid for getting the services. The findings from this study also indicated that health facility related factors and health providers' characteristics were important predicators of the overall maternal satisfaction (28).

3. A Modified Conceptual Frame work of Quality Care and its Attributes adopted from Donabedian



4. Objectives

4.1. General Objective

To assess the quality of delivery services at public health institution in Bishoftu town, Oromia Region, Ethiopia

4.2. Specific Objectives

1. To identify availability of basic and necessary infrastructure, equipment and drugs that could enable to conduct quality delivery services
2. To assess competency of health care providers to wards provision of quality delivery service
3. To determine the level of client satisfaction among women who gave birth at public health facilities in Bishoftu town
4. To identify factors associated with client's satisfactions on delivery services at public health facilities in Bishoftu town

5. Methods

5.1. Study Area

The study was conducted in Bishoftu town, Oromoia region, Ethiopia. Bishoftu is located 47 Km south east of Addis Ababa (the capital city of Ethiopia). In this city there are nine urban sub cities (kebele) and three rural sub cities (kebele). According to Bishoftu city administration health office, the total population in 2015/2016 expected to be 176,743. Out of the total population 90,139 (51%) are females and the rest 86,604 are males. The numbers of women who are in child bearing age group (15-49) are 39113, from this 6133 are pregnant and expected deliveries and a total of 5492 delivery services were provided by public health facilities from June 2015 to June 2016 (11). There were three health centers, 34 clinics, 25 private pharmacies, one air force hospital and one government hospital. Among 34 private clinics four are non-governmental, six specialty clinics, 24 primary and medium clinic. The study was conducted in all four urban-based public health facilities (one governmental hospital and three health centers in Bishoftu town).

5.2. Study Design

Mixed research method combining health facility based cross sectional study and qualitative research was used at all public health facilities found in Bishoftu town.

5.3. Study Population

Women who gave birth at public health facilities during the study period were the study population. Also all health personnel who attended women during labor, delivery, and in the immediate postpartum period at public health facilities were included to assess their knowledge and skill.

5.4. Sample Size determination

For client satisfaction interview sample size (n) was determined based on the assumption of proportion of delivering mothers satisfied with delivery service considering satisfaction as an output of quality health care as 80% (p=0.80) **(26)**, desired degree of precision (d) 0.05 and with 95% confidence level (Z α/2) and 10% contingency for non-response. Thus

$$n = \frac{(z\,\alpha_{/2})^2\, P\,(1-P)}{d^2}$$

$n = \frac{(1.96)^2 * 0.80 * (0.20)}{0.05^2}$ $n = 246$

Since the population is less than 10,000 the study considers correction formula

$n_{final} = \frac{n}{1 + n/N} = \frac{246}{1+246/6133} = 237$

Considering non response of 10%, the sample size was 261

For assessment of competency of health providers all who attend labor and delivery were included.

5.5. Sampling Procedures

All public health facilities found in Bishoftu town were included in the study. The sample was allocated for each health facility using proportionate to size that is based on the number of mothers served in each health facility from June 2015 to June 2016. To obtain 261 study subjects, a systematic random sampling technique was used. The sampling interval was calculated by dividing the average one-month population to the total sample size and this interval used in all facilities to select study subjects(k=2). The first client was selected by randomly among the first '2' delivery service users in the sample frame that were on the first and second bed number during the first day of data collection period.

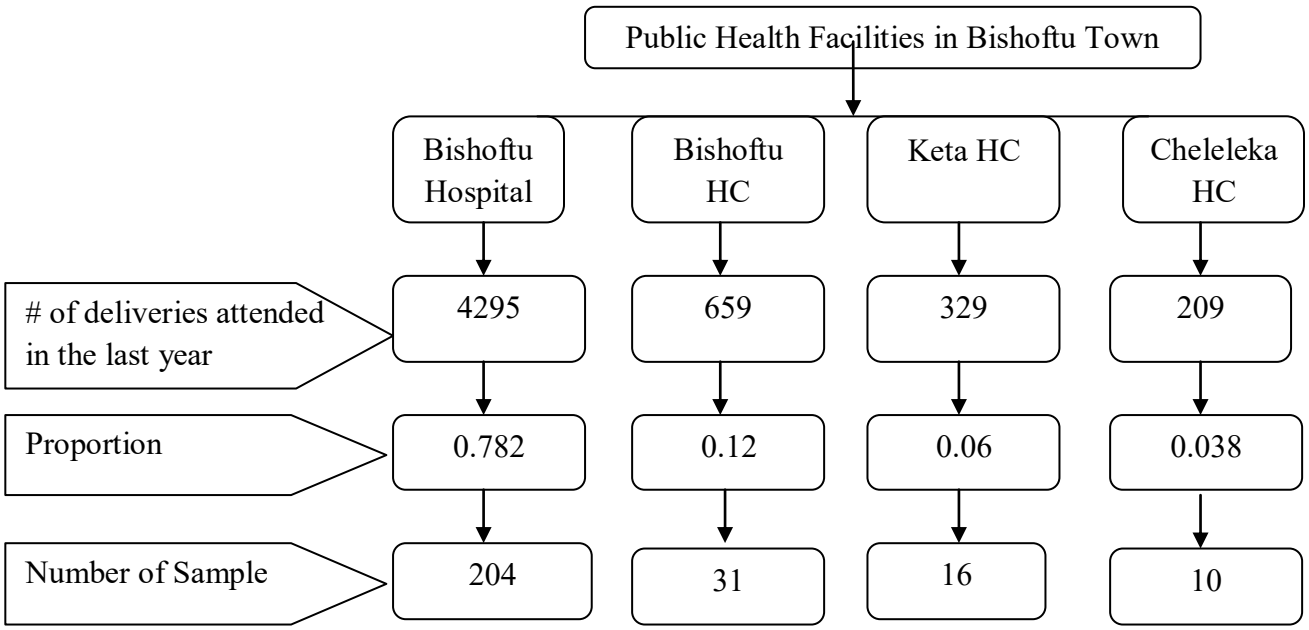


Figure 1: Proportionate Allocation of Sample to Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

For staff competency all health personnel who attended women during labor, delivery, and in the immediate postpartum period were included.

5.6. Data Collection Procedures

Data collection methods were interview, self administered question and observation with client and providers. Four major areas were assessed:

1. Identification of basic and necessary infrastructure using observation checklist and interviewing a focal person of labor and delivery at the facility using instrument adopted from WHO Hospital Care for Mothers and Newborns: Quality Assessment and Improvement Tool (29).
2. Identification of availability of essential drugs and medical equipment for the provision of EmONC using observation and interviewing a focal person of labor and delivery at the facility.
3. Skilled delivery service provider competency for maternal and newborn care using structured questionnaire for knowledge and observation checklist for skill assessment. For knowledge assessment using questions adopted from a literature (9) and BEmONC manual (30) for skill, observations of the entire labor and delivery experience; from the admission process, through observation of the active phase of the first stage of labor, and then continuous observation of the second, third and fourth stages. The skill assessment continues till an hour postpartum and conducted based on checklist adopted from WHO Hospital Care for Mothers and Newborns: Quality Assessment and Improvement Tool(29) by principal investigator.
4. Overall satisfaction of women who gave birth at the facility during data collection period using structured questionnaire that was filled before discharge.

There were a total of seven diploma Nurses that were involved in data collection and one BSc midwife as supervisor. Observation was done by principal investigator.

5.7. Operational Definitions

Client satisfaction: client's attitude of the service delivery based on their experience and expectations

Dissatisfied: client's experience of the care is not up to their expectation

Highly dissatisfied: Fail to meet client's expectation leading to disappointment

Highly satisfied: client's experience of the care is above their expectation

Knowledgeable:-If health care provider answers more than half of each knowledge assessment questions correctly

Neutral: Client who were not willing or ignore to respond to specific question

Outcome: client's level of satisfaction

Process: things done to and for the client by practitioners in the course of labor and delivery service.

Quality of delivery service: when clients get satisfied, if the healthcare system has necessary and enough drugs, equipments and infrastructure and clients treated with respectful maternity care to conduct safe delivery care.

Satisfied: client's experience of the care is up to their expectation

Staff competency: the ability to manage labor and delivery by skilled health care provider based on standard in terms of knowledge and skill

Structure: constitute health facility infrastructures, availability of drugs without stock out in the last three months, instrument and availability of staffs

Timeliness: is the speed at which mothers can receive care as quickly as possible

Those clients who were responded as either satisfied or highly satisfied are categorized under satisfied; and who were responded as highly dissatisfied, dissatisfied or neutral was categorized under unsatisfied. Neutral responses were classified as dissatisfied considering that they may represent a fearful way of expressing dissatisfaction. Those who were satisfied in $\geq$ 75% of the

items in the questionnaire was classified under satisfied. And those who were satisfied in < 75%of the items in the questionnaire was classified under unsatisfied.

5.8. Data Quality Management

Prior to data collection data collectors were given training for three days by the principal investigator. Pretest of questionnaire was done. Data was collected after obtaining informed consent from each client and provider. The interview was conducted in a room which allowed privacy. Confidentiality was maintained using codes; names of respondents were not used in any of the data collection instruments.

5.9. Data Analysis Procedures

Each completed questionnaire was properly coded, entered and cleaned using Epi Info version 3.5.3, analysis was done using SPSS version 21 for statistical calculation.

The data analysis was made, using the cross tabulation analysis to assess the proportion of relevant independent variables of socio-economic and obstetric characteristics in relation with the outcome variable after which binary logistic regression method was used to identify whether they have association with the outcome variable and the strength of association between independent variables proofed to have strong association by calculating the crude odds ratios and then to assess the significance of their association by multivariate analysis with the cut-off point of p-value < 0.05 and the 95% confidence interval by calculating the adjusted odds ratio. Mean score was used for data analysis of knowledge assessment. For qualitative data thematic content analysis method was used.

5.10. Ethical Consideration

The study was started after obtaining administrative permission and ethical clearance from AAU School of Public Health, Research Ethics Committee (REC) and from the participating government health institution. All study participants were respected. The purpose of the study was mentioned for each participant. They were participated in the study voluntarily. Information was provided for each of them and asked for their consent. Those who were agreed with informed consent voluntarily were part of the study. Their personal information was kept

confidential. They were informed that, they can refuse to participate anytime if they don't want and that would not have any impact on their access to service.

5.11. Dissemination of Results

The final result of the study will be submitted to Addis Ababa University School of Public Health. A copy will also be given to School's library, participant health institution, town health office, Oromia Regional Health Bureau and FMoH. The study will also be presented in national conferences and also will be submitted to scientific journals for possible publication.

6. Results

6.1. Client Satisfaction

6.1.1. Socio-demographic Characteristics

A total of 254 women who gave birth at all public health facilities found in Bishoftu town had participated in the exit interviews. Most, 197(77.6%) of the women were interviewed at Bishoftu Hospital, 31(12.2%) at Bishoftu Health Center, 16(6.3%) from Ketta Health Center and the rest 10(3.9%) from Cheleleka Health Center. More than two third 174(68.5%) of the women were young aged between 20-34 years with the median age of 25, 150(59.1%) of the respondents had attended secondary school and above and 48 (18.1%) had no formal education, 232(91.3%) were married, 143(56.3%) were unemployed, 208(81.9%) were living in urban areas (Table 1). The median household income was 2500 ETB.

Table1: Socio-demographic Characteristics of participants at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Characteristics	Frequency	Percent
Age Category		
<20	54	21.3
20-34	174	68.5
35-49	26	10.2
Residence		
Urban	208	81.9
Rural	46	18.1
Marital Status		
Married	232	91.3
Single	6	2.4
Divorced	8	3.1
Widowed	8	3.1

Religion		
Orthodox	164	64.6
Other christian	59	23.2
Muslim	26	10.2
Wakefeta	5	2.0
Occupation		
Government employee	27	10.6
Private employee	43	16.9
Own Business	41	16.1
Unemployed (house wife)	143	56.3
Educational Status		
No formal education	46	18.1
Primary	58	22.8
Secondary and above	150	59.1
Household Income (ETB)		
<1000	49	19.3
1000-2000	72	28.3
>2000	133	52.4

6.1.2. Obstetrics Characteristics of Respondents

For 53.5% of women, this was the first delivery. A quarter of women (26%) had unplanned pregnancy. 97.6% of women had ANC visit in the last pregnancy among this the majority (60.9%) had four or more ANC visits. 51.2% of women had greater than 12 hour duration of labor. Spontaneous vaginal delivery was the commonest mode of delivery (67.7%) followed by operative delivery (22%). 93.7% of the women were gave live birth and only 3.9% of the women were paid for the drug and supply (Table 2).

Table 2: Obstetrics Characteristics of Respondents at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Variables	Frequency	Percent
Birth order		
First baby	136	53.5
No	118	46.5
Number of Alive Children		
0	1	.8
1	57	48.3
2-3	49	41.5
4-5	9	7.6
6	2	1.7
Mode of Delivery of Current Child		
Spontaneous	172	67.7
Instrumental	26	10.2
Operative	56	22.0
Planned Pregnancy		
Yes	188	74.0
No	66	26.0
ANC Visit in the Last Pregnancy		
Yes	248	97.6
No	6	2.4
Number of ANC Visit		
1-3	97	39.1
4+	151	60.9
Estimated Duration of Labor (Hour)		
<=12 hrs	124	48.8
>12 hrs	130	51.2
Modality of Payment for Drug and Supply		
Free	244	96.1

Not free	10	3.9
Newborn Outcome		
Live	238	93.7
Dead	10	3.9
Other Complication	6	2.4

6.1.3. Mothers' Satisfaction on Delivery Care

The proportion of mothers who were satisfied with delivery care in this study was 58.7%. Of all satisfaction levels, level of health providers treated a mother (96.9%), professionals speak in a language that a mother understand (97.2%), availability of adequate delivery coach (97.7%) were among the first three commonest factors that delivering mothers were more satisfied where as access to latrine and hand washing (15.7%), allowance to practice cultural rituals in the facility (30.7%) and availability of proper curtain related satisfaction (33.5%) were the first three major factors that makes mothers less satisfied(Table 3).

Table 3: Mothers' Satisfaction on Delivery Care at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Domains	Variables	Unsatisfied	Satisfied
Health facility structure	Availability of Drugs	52(20.5%)	202(79.5%)
	Availability of Sufficient Health professionals	28(11%)	226(89%)
	Accessibility of Ambulance	24(9.4%)	230(90.6%)
	Availability of Adequate Delivery Coach	7(2.8%)	247(97.2%)
	Availability of Clean Delivery Coach	52(20.5%)	202(79.5%)
	Cleanliness of the Room	71(28%)	183(72%)
	Room Light and Ventilation	39(15.4%)	215(84.6%)
	Accessing Bed with Mattress	54(21.3%)	200(78.7%)
	Access to Latrine and Hand washing	214(84.3%)	40(15.7%)

Provision of adequate and accurate information	Giving Answer to Questions	52(20.5%)	202(79.5%)
	Professionals Speak in a Language that a Mother Understand	7(2.8%)	247(97.2%)
	Explaining Well and Listening Carefuly to Client	55(21.7%)	199(78.3%)
	Explain About Progress of Labor	63(24.8%)	191(75.2%)
	Information About Vaginal and Physical Examination	59(23.2%)	195(76.8%)
Privacy	Availability of Proper Curtain	169(66.5%)	85(33.5%)
	Privacy During Communication	74(29.1%)	180(70.9%)
	Position of the Bed Away from Doors	57(22.4%)	197(77.6%)
	Windows and Doors Closed	36(14.2%)	218(85.8%)
Timeliness	The Admission Procedure was Good	80(31.5%)	174(68.5%)
Treating client respectfully	Services Provided Without Discrimination	26(10.2%)	228(89.8%)
	Health Provider Called by Name	55(21.7%)	199(78.3)
	Health Provider Greeted a Mother	120(47.2%)	134(52.8%)
	Health Providers Treated a Mother	8(3.1%)	246(96.9%)
	Companions Allowed to Enter Delivery room during delivery	149(58.7%)	105(41.3%)
	Consent was Requested for all procedures performed	38(15%)	216(85%)
	Allowance to Practice Cultural Rituals in the Facility	176(69.3%)	78(30.7%)
	Non Physical Abuse Status of Women in Labor	3(1.2%)	251(98.8%)
Staff competency	Perceived Capacity of Professionals	50(19.7%)	204(80.3%)

In multivariate analysis, the distribution of the degree of satisfaction did not differ among the facilities (P = 0.56).Socio-demographic characteristics (age, level of education and monthly income) and obstetric history (mode of delivery, plan to have this pregnancy and newborn outcome) were important predicators of the overall maternal satisfaction (p value<0.05).

Women's satisfaction with delivery care was associated with age group 20-34 years [AOR = 3.53, 95% CI: (1.10-11.36)], secondary level of education and above [AOR = 0.33, 95%CI: (0.12-0.96)], household income [AOR= 3.29, 95% CI: (1.25-8.68)] and [AOR= 3.29(1.45-7.47] for income <1000 and 1000-2000 ETB respectively.

The other predictor of maternal satisfaction was delivering mothers who have planned to have recent pregnancy [AOR= 3.24, 95% CI: (1.44-7.30)], operative mode of delivery of current child [AOR= 0.20, 95% CI: (0.08-0.47)], and newborn outcome with complication [AOR= 0.04, 95% CI: (0.003-0.50)] (Table 4).

Table 4: Socio-demographic and Obstetric Factors Associated with Mothers' Satisfaction in Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Variables	Satisfied	Unsatisfied	COR (95% CI)	AOR(95%CI)
Type of health facility				
Hospital	109(55.3%)	88(44.7%)	0.53(0.28-0.99)	1.29(0.54-3.07)
Health Center	40(70.2%)	17(29.8%)	1	
Age category				
<20	32(59.3)	22(40.7%)	1.98(0.77-5.12)	2.08(0.51-8.51)
20-34	106(60.9%)	68(39.1%)	2.13(0.92-4.90)	3.53(1.10-11.36)*
35-49	11(42.3%)	15(57.7%)	1	
Residence				
Urban	118(56.7%)	90(43.3%)	0.63(0.32-1.25)	0.97(0.35-2.66)
Rural	31(67.4)	15(32.6%)	1	
Level of Education				
No formal education	29(69.0%)	13(31.0%)	1	
Primary	40(69.0%)	18(31.0%)	0.97(0.42-2.25)	1.06(0.35-3.23)
Secondary and above	50(49.0%)	52(51.0%)	0.46(0.23-0.93)	0.33(0.12-0.96)*
Household Income (ETB)				
<1000	35(71.4%)	14(28.6%)	2.95(1.45-5.99)	3.29(1.25-8.68)*
1000-2000	53(73.6%)	19(26.4%)	3.29(1.76-6.15)	3.29(1.45-7.47)*
>2000	61(45.9%)	72(54.1%)	1	

Birth order				
First baby	73(53.7%)	63(46.3%)	1.56(0.94-2.59)	1.82(0.88-3.73)
No	76(64.4%)	42(35.6%)	1	
Mode of Delivery of Current Child				
Spontaneous	115(66.9%)	57(33.1%)	1	
Instrumental	10(38.5%)	16(61.5%)	0.31(0.13-0.73)	0.53(0.16-1.71)
Operative	24(42.9%)	32(57.1%)	0.37(0.20-0.69)	0.20(0.08-0.47)*
Planned Pregnancy				
Yes	118(62.8%)	70(37.2%)	1.90(1.08-3.35)	3.24(1.44-7.30)*
No	31(47.0%)	35(53.0%)	1	
ANC Visit in the Last Pregnancy				
Yes	144(58.1%)	104(41.9%)	0.28(0.03-2.41)	
No	5(83.3%)	1(16.7%)	1	
Number of ANC Visit				
1-3	61(62.9%)	36(37.1%)	1.39(0.82-2.34)	1.04(0.49-2.21)
4+	83(55.0%)	68(45.0%)	1	
Newborn Outcome				
Live	142(59.7%)	96(40.3%)	1	
Died	6(60.0%)	4(40.0%)	1.01(0.28-3.69)	0.82(0.16-4.14)
Other Complication	1(16.7%)	5(83.3%)	0.14(0.02-1.18)	0.04(0.003-0.50)*

N.B. 1(reference group), * Significant at P<0.05, CI=confidence interval, COR (Crude Odd Ratio), AOR (Adjusted Odd Ratios)

6.2. Availability o f Infrastructure, Human Resource, Drugs, Supplies and EmONC Signal Functions

6.2.1. Availability of Infrastructure

Table 5 shows that all health facilities in the assessment have electric power and water; but do not have easily accessible toilet, shower, water and soap for hand washing.

Table 5: Availability of Infrastructure at Public Health Institutions found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Items	Required	Available
Power	4	4
Water	4	4
Hygienic conditions		
Room is clean with no visible soil	4	4
Toilets and washing areas are clean and warm	4	0
Waste are collected properly	4	4
Soap for hand washing	4	0
Easily accessible water for hand washing	4	0
Beds are adequate		
Each mother has her own bed that is large enough for safe co-bedding with her infant	4	4
Hygiene facilities are accessible and adequate		
Easily accessible adequate number and type of toilet	4	0
Easily accessible adequate number and type of showers	4	0
Hot water available continuously	4	0

6.2.2. Available of Health Care Providers

Integrated Emergency Surgery Officers 3, all types of laboratory 20, nurses 91 and pediatrician 1, midwives 23, all types of pharmacy 21, general medical doctors 15**,** obstetrician/gynecologist 1and general surgeon2, Radiologist 1. All health centers had at least one mid wife ranging from 1-3 per health center and hospital had 16 among this 14 midwifes work in labor and delivery and the rest at ANC and gynecology ward.

6.2.3. Availability of Essential EmONC Drugs and Supplies

Three of four assessed health facilities had at least one parenteral antibiotic with Ampicillin and Metronidazole followed by Gentamycin in two health facilities. Only two out of four health facilities had at least one parenteral anticonvulsant where Magnisium sulphate was available in

two health facilities and diazepam in one the health facilities. Pertaining to the antihypertensive drugs, three health facilities had at least one type with methyldopa. Thermometer and urine dipstick for protein was available only at one of the health facilities (Table 6).

Table 6: Availability of Essential EmONC Drugs and Supplies at Public Health Institutions found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Standard drugs and equipment	Required	Available
At least one parentral antibiotic	4	3
Ampicillin		3
Chloramphenicol		0
Metronidazole		3
Gentamycin		2
At least one anticonvulsant	4	2
Magnesiumsulphate		2
Diazepam		1
At least one antihypertensive	4	3
Hydralazine		1
Methyldopa		3
At least one oxytocics	4	4
oxytocin		4
Ergometrine		3
Misoprostol		1
At least one type of IV fluid	4	4
Ringer lactate		4
Normalsaline		4
Diagnostic Equipment		
BPapparatus	4	4
Stethoscope	4	4
Thermometer	4	1
Urinedipstickforprotein	4	1
Partograph	4	4
Availability of Vacuum Extraction /Forceps Delivery Sets	4	4
Vacuumextractionwithdifferentsize	4	2
Forcepsdeliverysets	4	1
Availability of Uterine Evacuation Sets		
Vaginalspeculums	4	4
Sponge(ring)forcepsoruterinepacking	4	4

Disposablecordtiesorclamps	4	4
Towelorblankettowrapbaby	4	1

6.2.4. EmONC Signal Functions Performance

Among studied health facilities only one health center and one Hospital give all BEmONC and CEmONC signal function respectively. The least performed signal functions (1/3) at Health center was administration of parenteral antibiotic, anticonvulsants, manual removal of placenta, assisted vaginal delivery and neonatal resuscitation. All health facilities performed signal function was administration of uterotonics(Table 7).

Table 7: Performance of EmONC Signal Functions at Public Health Institutions found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Signal Functions	Facilities that perform signal functions at least once in the past 3 months	
	Health Center (n=3)	Hospital (n=1)
Provision of Parenteral antibiotics	1	1
Parenteral uterotonic	3	1
Parenteral anticonvulsant	1	1
Manual removal of placenta	1	1
Removal of retained products	2	1
Assisted vaginal delivery	1	1
Neonatal resuscitation	1	1
Blood transfusion	N/A*	1
Surgery (C/S)	N/A*	1
Health facility that performed all signal function in the past three month	1	1

*Not Applicable

6.3. Staff Competency

6.3.1. Knowledge Assessment

This study assessed delivery service provider knowledge using multiple-choice questions adopted from a literature (9) and BEmONC manual (30) and all (n=21) interviewed health professionals were midwives who are working at labor and delivery care. In general, this study showed insufficient mean knowledge score. Among questions the lowest three least mean

knowledge score was diagnosing birth asphyxia, immediate and essential newborn care and knowledge of signs to assess a woman with postpartum hemorrhage (Table 8).

Table 8: Assessment of Knowledge of Delivery Service Provider at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Question	Mean score
1. How do you know when a pregnant woman is in labour?	3.71
Average score (out of 4)	
2. What do you monitor when a woman is in labour?	8.29
Average score (out of 9)	
3. What are the steps of AMTSL?	2.52
Average score (out of 3)	
4. What do you look for when a woman arrives with or develops heavy bleeding after birth?	4.38
Average score (out of 6)	
5. What do you do when a woman arrives with or develops heavy bleeding after birth?	8.29
Average score (out of 10)	
6. How do you diagnosis birth asphyxia?	2.9
Average score (out of 4)	
7. What are immediate and essential newborn care	5.86
Average score (out of 8)	

6.3.2. Skill Assessment (Observation of service Providers Skill)

The study involved observation of 39 deliveries while health workers were providing the service to the women using structured observation checklist.

6.3.2.1. Initial Client Assessment

Routine labor and delivery care encompasses activities from initial assessment to care during the first, second, third, and fourth stages of labor. This section presents findings for initial assessment tasks (Figure 2).

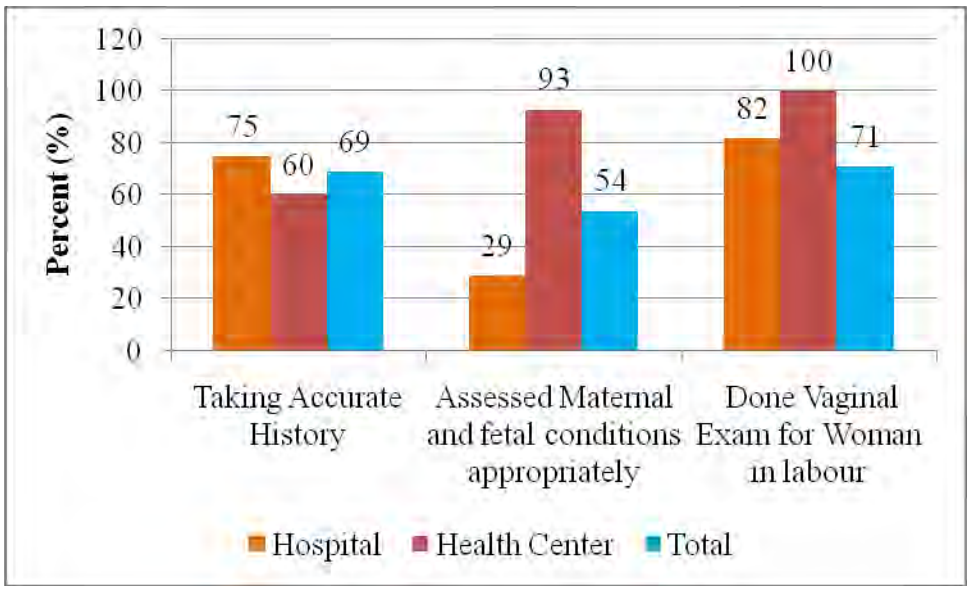


Figure 2: Performance of Initial Client Assessment for Women in Labour at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

Maternal and fetal conditions were appropriately assessed (including observations of vital signs, abdominal palpation and auscultation of fetal heart rate) in 54% of the observations and vaginal exam was offered for woman appears to be in labour in 71% of the observations and taken accurate history in 69% of the observations during initial assessment.

6.3.2.2. Respectful Maternity Care

All health providers (n=21) who attend women during labor, delivery, and in the immediate postpartum period in all public health facilities participated in this study introduce themselves to the woman at their initial contact in 3% of the observations and informed about the purpose of every procedure and taken consent in 13 % of cases (Table 9). Also it was noted that providers informed women at every step on progress of labour in 21% of observations. Women were allowed to have a companion with them for support in only 5% of cases. 51% of the women were offered oral fluid and light foods. Women's privacy were kept in 44% of the observations using curtains/screens while windows and doors were closed and others were not allowed to observe the procedure in 56% of the cases.

Table 9: Performance of Respectful Maternity Care at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017 (n=39)

Variables	Hospital (%)	Health Center (%)	Total (%)
Curtains/Screens was used to keep Women's privacy	38	53	44
Bed was positioned away from doors or windows	83	73	80
Windows and Doors were closed & not allowed others to see any procedure	58	53	56
Staff introduced themselves to the woman	4	0	3
Informed about the purpose of every procedure and taken consent	0	33	13
Informed women at every step on progress of labour	0	53	21
Staffs listen to the woman's preferences and involved her in decisions	21	73	41
Allowed companion to remain with women during labour and birth	0	13	5
Worked in cooperation with the labour support companion	21	100	51
Health Workers stayed at women side as much as possible	46	60	51
Actively offered oral fluids and light food	38	73	51
Encouraged voiding as needed	54	60	56
Mean percentage of RMC	**30**	**54**	**39**

6.3.2.3. Infection Prevention Practice

The aggregate mean score for adherence to standard infection prevention practices was 70% with differences in key infection prevention practices. Hand washing was done with soap and water before assisting birth in only 18% of deliveries and 59% after assisting birth. Use of protective gloves during birth and while disposing of waste was 100%. Correct disposal of sharps, disposal of contaminated waste, and decontamination of used apron were 80%, 100% and 41% in the observed cases respectfully. Only 33 % of the women's families were not exposed to biological waste (Figure 3).

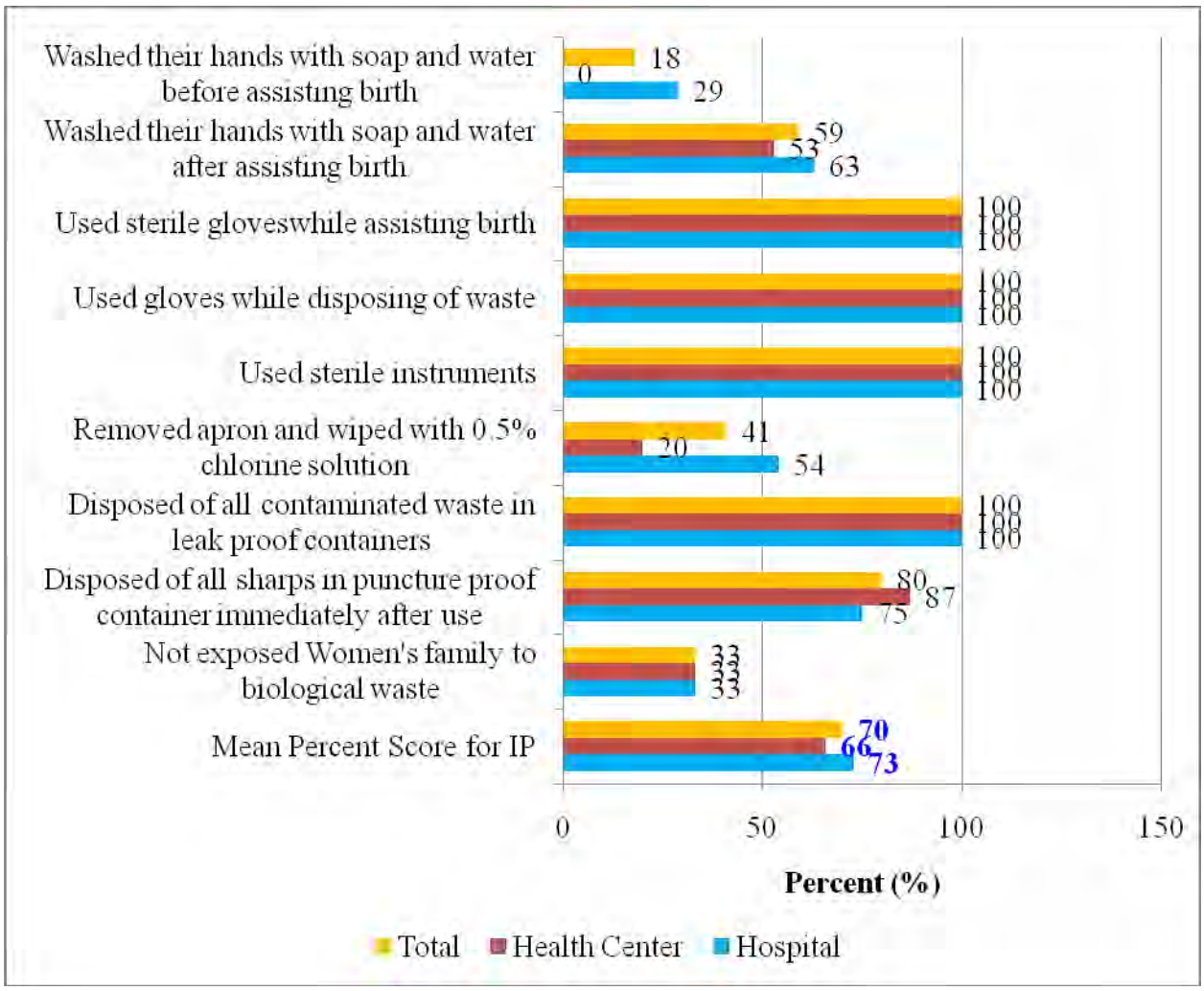


Figure 3: Providers Infection Prevention Practice during Labour and Delivery Care at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

6.3.2.4. Utilization and Proper Partograph plotting

WHO standard partograph was used in 80% of the deliveries observed and the mean score of plotting was 60%. But while reviewing its completeness by its components, it was plotted in the range of 15% (decent of head) to 100% (maternal blood pressure). It is only plotted in 59% before the intervention was carried out and partograph was used in 39% of the cases for labour management intervention (Figure 4).

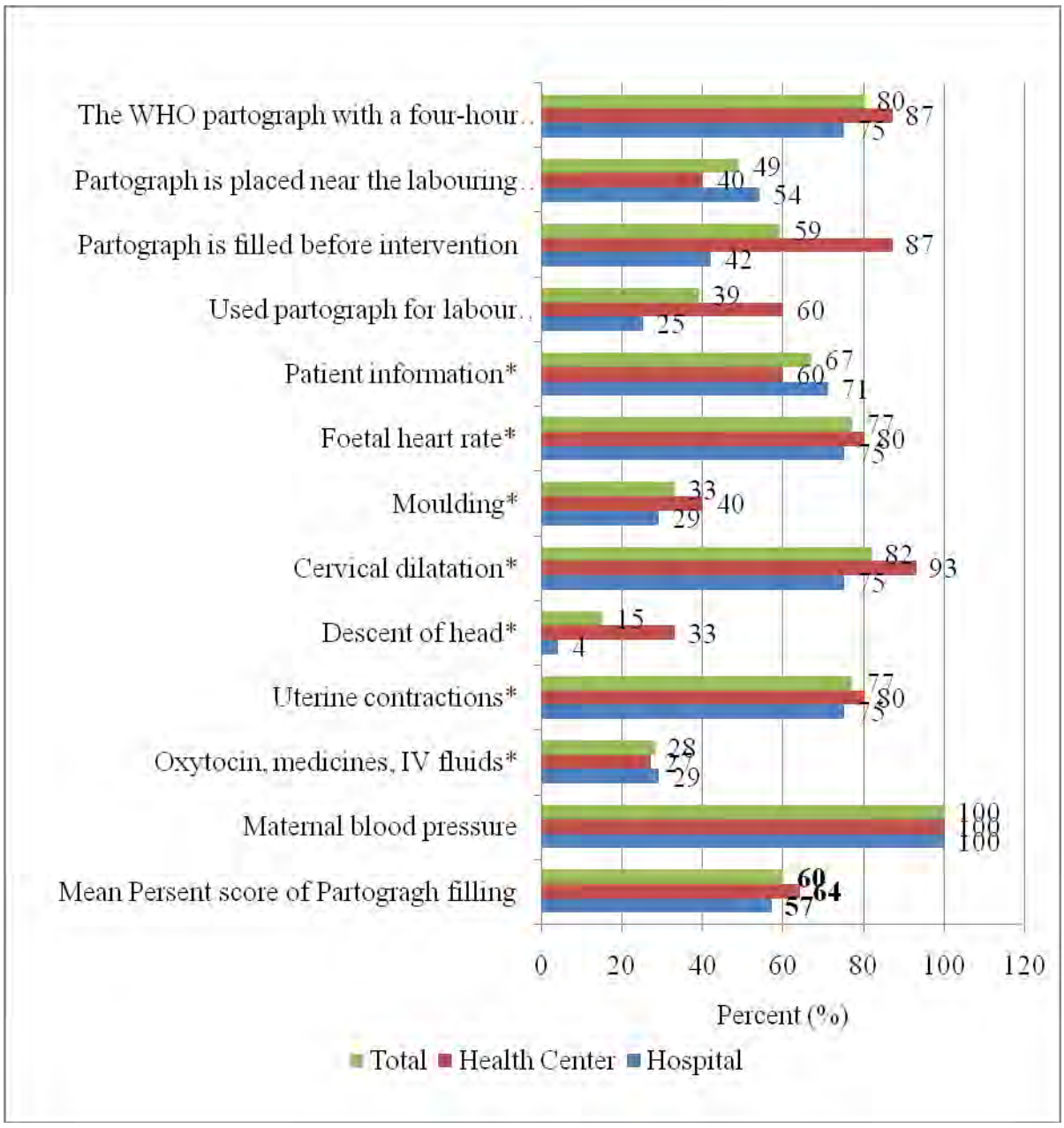


Figure 4: Partograph Utilization at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017

*Proper Partogragh plotting

6.3.2.5. Performance of Care Provided by Health Workers

Mean score of care provided by service providers during labour, delivery and postpartum was 81%. 92% of the women were free to walk in first stage of labour and encouraged to choose

different position. Once the women were in second stage of labour staffs were wait them until spontaneous urge to push in 90% of the cases. In 100% of the cases Oxytocin was provided, in 95% of the cases controlled cord traction was done and uterine massage was done in 62% of the observations during active management of third stage labour. Placenta was checked for its completeness in 62% of the deliveries observed and 77% of the women were checked for their uterine contraction (Table 10).

Table 10: Performance of Care Provided by Health Workers at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017 (n=39)

Variables	Hospital (n=24)	Health Center (n=15)	Total (N=39)
Women were free to walk and encouraged to choose different position	88%	100%	92%
Once the woman was fully dilated, staff wait until she feels the spontaneous urge to push	83%	100%	90%
Second stage duration was calculated from the start of active pushing	67%	87%	74%
Given Oxytocin 10 IU IM after expulsion of shoulders or within 1 minute after birth of baby	100%	100%	100%
Controlled cord traction was routinely performed	92%	100%	95%
Uterine massage was routinely performed	58%	67%	62%
Checked fundus and contraction of the uterus after the placenta is delivered	83%	67%	77%
Placental membrane was inspected for completeness after birth	63%	60%	62%
Mean Score of Care Provided	**79%**	**85%**	**81%**

6.3.2.6. Performance of Initial Assessment of the Newborn and Mother Infant Contact

Only 43% newborns were dried with a towel immediately after birth, placed skin-to-skin on the mother's chest or abdomen, assessed for the general condition of the new born and mothers and

newborn was not separated from their mothers and remain skin to skin contact while routine procedures were performed. In 100 % of the cases cord clamping was done after at least one minute (Table 11).

Table 11: Performance of Initial Assessment of the Newborn and Mother Infant Contact at Public Health Institutions Found in Bishoftu Town, Oromia Region, Ethiopia, 2017 (n=39)

Variables	Hospital (%)	Health Center (%)	Total (%)
Women was encouraged to have skin to skin contact with their babies	32	60	43
The newborn was dried within the first 30 seconds after birth	32	60	43
In the first minute after birth assessment was carried out whilst the baby was in skin to skin with the mother	32	60	43
Umbilical cord was clamped after at least one minute unless there was an immediate clinical need to clamp early	100	100	100
Mothers and babies remain in skin to skin contact and were not separated for routine procedures for a minimum of one hour	32	60	43

7. Discussion

The study using Donabedian framework, found that quality of delivery service at public health facilities found in Bishoftu town is inadequate on the overall which is explained by BEmONC signal functions, low client satisfaction, low mean percentage of respectful maternity care and knowledge and skill of providers not up to expected standard.

The overall proportion of satisfaction (58.7%) of the respondent in this study was very low compared to other study. The study at Assela Hospital indicated higher satisfaction rate of 80.7% (26). However, comparable findings on the study conducted on mothers' satisfaction with the delivery services provided at referral hospitals in Amhara Region, Ethiopia indicates, an overall satisfaction were 61.9%. This variation may be because of a real difference in quality of services provided, expectation of mothers or the type of health facilities. According to this study there was no significant difference of satisfaction among Hospital and Health centers.

Multivariate logistic regression analysis was made to identify factors associated with the overall satisfaction. In this study identified that age, level of education and monthly income, mode of delivery of current child; plan to have the pregnancy and newborn outcome were significantly associated variables with client satisfaction.

Women's satisfaction with delivery care with age group20-34 years [AOR = 3.53, 95% CI: (1.10-11.36)] were three times satisfied with delivery care than those whose age was 35-49. Regarding economic status of delivering mothers, mothers whose monthly income were less than 1000 [AOR= 3.29, 95% CI: (1.25-8.68)] and 1000-2000 ETB [AOR= 3.43(1.45-7.47)] were three times more satisfied than mothers whose income were greater than 2000ETB. Similarly the study conducted at Assela Hospital also indicated significant association of the satisfaction with maternal age group20-34 years are four times more satisfied than with age group 35-49 years and those with low monthly income are more satisfied than higher income.

Participants with educational level of secondary level and above were less likely satisfied with the service given than uneducated [AOR=0.33, 95% CI: (0.12-0.96)]. Level of education was key factors influencing satisfaction as level of education increase satisfaction level decreases from

previous studies(26-28), where the possible reason for these women with higher level of schooling needs more quality care for satisfactions.

Regarding obstetric characteristics delivering mothers who have planned to have recent pregnancy [AOR= 3.24, 95% CI: (1.44-7.30)] were three times more satisfied than those with unplanned pregnancy , those with operative mode of delivery of current child [AOR= 0.18, 95% CI: (0.07-0.46)] were dissatisfied than spontaneous vaginal delivery , and those mothers their newborn outcome have complication [AOR= 0.03, 95% CI: (0.002-0.42)] were less satisfied than live newborn outcome. Similarly, study conducted in A.A shows those mothers delivered their baby by operative were less satisfied than spontaneous vaginal delivery.

In studies conducted on mothers' satisfaction at Assela, Amhara region, A.A and on status of respectful care at A.A mothers were complaining inadequate privacy (24, 26-28). Similarly, in this study among the first three major factors that mothers were less satisfied was inadequate privacy with unavailability of proper curtain (33.5%). Also survey done in Zanzibar and Ethiopia, most women were in shared delivery rooms with no curtains to separate patients and no way to talk without being overheard(23)

Other major factor that makes mothers less satisfied was allowance to practice cultural rituals in the facility (30.7%). In Ethiopian tradition/ culture it is assumed mothers after delivery is visited by their relative and neighbors eat porridge and conduct coffee ceremony. When they are in the health facility they miss the entire companionship. Other study findings also indicate that inability of family members to be present during labour and delivery in health facilities at health institutions is the other important reason for preference of home delivery(12).

In this study, the least value of satisfaction was access to latrine and hand washing (15.7%). However, other studies on access and cleanliness of toilet shows satisfaction level between 55-70%(26, 28) which is higher than this study. Difference could be attributed to this study measured level of satisfaction of access to latrine with hand washing and detailed reasons for this low latrine and hand washing service satisfaction were found during identification of basic infrastructure using observation checklist and interviewing a focal person of labor and delivery at each facility. It has been seen that latrines were far away from the labor and delivery ward and

no accessible hand washing with soap. The gap in the hand washing condition has also implication with infection prevention measure in the public health facility.

Of all satisfaction levels, health providers treated a mother without depending on some personal attribute (96.9%), professionals speak in a language that a mother understand (97.2%), availability of adequate delivery coach (97.7%) were among the first three commonest factors that delivering mothers were more satisfied. Similarly the study in A.A on status of respectful care found that woman receives equitable care free of discrimination: 89.9 % of the providers spoke to a mother with a language that they understand and 97.1% treated a mother without any personal attribute(24).

In general, this study on knowledge of delivery care providers shows insufficient mean knowledge score. Hemorrhage and birth asphyxia are major cause of maternal and neonatal death(30) and among the lowest three least mean knowledge score was on diagnosing birth asphyxia, immediate and essential newborn care and knowledge of signs to assess in a woman with postpartum hemorrhage. Consistent with this study findings, in a nationwide survey only 52% of the providers have knowledge of signs to assess in a woman with postpartum hemorrhage and 55% of professional have had sufficient knowledge on essential newborn care(8). Also a comparative study done on BEmONC shows low level of mean knowledge score on sign to assess a woman with PPH and diagnosing birth asphyxia(9).

The study has shown that all of public health facilities found in Bishoftu town had electric power, water, clean room with no visible soil, collect their waste properly and each mother have their own bed that is large enough for co-bedding with their infant. However, none of studied health facilities had easily accessible toilet, shower and hand washing facilities with soap; which are far from labor and delivery room

Regarding availability of essential drugs, supplies and equipments, the target for HSTP is 100% for health facilities(3). But, in this study except uterotoic drugs not all of the health facilities had 100% availability of parenteral antibiotic, anticonvulsants (Magnisium Sulphate), antihypertensive drugs. That means target was not met for parenral antibiotic, anticonvulsant and antihypertensive. Even though health care financing system that enabled health facilities to retain

and utilize their revenue for solving health facilitys' priority problems, like drugs and supplies availability, there was no much improvement.

This study revealed that administration of anticonvulsant drugs, antibiotics, performing manual removal of placenta, neonatal resuscitation and performing assisted vaginal delivery were the least performed signal functions. This is similar with a study finding conducted by FMOH on national need assessment of EmONC in 2008(8). Moreover, this finding shows that there was no that much progress since then.

A complete assessment provides health workers with information as to whether or not a client needs extra care and helps them to determine the level at which the labouring mother should be managed. In this study only 54% of the observed women were appropriately assessed for maternal and fetal condition and low level of vaginal examination done at initial assessment at hospital level than health center due to work overload and seen after admission during first stage of labour follow up; this shows that most women were not got proper care and management. This finding correspond to the study in Ethiopia's hospitals on initial assessment of women in labour showed wider range by components; 19% for asking urine output to 94%for conducting vaginal exam and 96% for checking fetal heart rate and concluded overall performance was low(7) .

Among HSTP identified four transformation agenda to achieve the target set for the period two of them are transformation in equity and quality of health care and caring, respectful and compassionate health workforce(3). Quality of care during labor and delivery is measured in part by the extent to which women are treated with respect, have appropriate communication with and emotional support from a health care provider, and are provided with a degree of privacy(16). Respect for women and their birthing preferences determine women's preference of facility based health care (12, 22, 23). Mean score of Respectful maternity care during the study was 39%; ranging from 3% (staffs self introduction to service users) to 80% (positioning bed away from door or window).The study conducted in Addis Ababa also sowed high prevalence of disrespectful and abusive care in areas of right to information, informed consent and choice or preference of position (24).

Failure to follow proper infection prevention practices puts healthcare workers, patients and the communities at tremendous risk of acquiring infection and leads to low quality of service(30).In

this study mean score of infection prevention practices were 70%; with good practices in areas of gloving, waste disposal and sterilization. But low practices in areas of universal infection prevention practices (hand washing before procedure 18%); which is almost similar to the study conducted in Ethiopia's hospital that revealed hand washing practices were almost none before initial or subsequent procedures with the availability of water and soap (7).

Partograph help birth attendants make better decisions for the diagnosis and management of prolonged and obstructed labor as well as to help detect fetal distress and pre-eclampsia (30). However, it is found that a partograph was used in 80% of the observation with mean score of filling it was 60%. This is relatively better than the study conducted in Ethiopia's hospitals (district, zonal, referral and specialized hospitals); that found utilization 13% of the deliveries and only 26% of it was filled out completely (7). The variation is because of the study areas involved and high number of trained staff (almost all) than the previous study (68%).

Care provided by health workers during Labour, Delivery and Postpartum was encouraging with mean score of care 81% (ranging from 62% - checking for placental completeness and conducting uterine massage to 100% - giving Oxytocine). AMTSL is better performed in this study (mean score 86%) than assessment done in Ethiopia's Hospital (Mean score 63%)(7); this is also may be due to variation in type of facilities involved and availability of trained staff.

According to this study finding majority of the newborn was exposed to hypothermia (only 43% of the newborn was dried and kept in skin to skin contact with their mothers) and in all of the cases cord clamping was delayed. Study done in Ethiopia's hospitals also indicate only 12% of newborns were placed skin-to-skin on the mother's chest or abdomen. In only about a third of the cases that health workers delay cord clamping/tying; until two-three minutes.

8. Strengths and Limitations of the Study

8.1. Strengths of the Study

- This study tried to assess many aspects of quality; it dealt with availability of basic infrastructure, services, essential drugs and instrument, knowledge and skill of providers and client satisfaction.
- In this study different methodologies for specific purposes were applied.
- The study covered all of the public hospitals in city of Bishoftu; to make them representative of the findings.

8.2. Limitations of the Study

- The observation part of this study didn't include operative deliveries
- Social desirability bias.

9. Conclusion and Recommendation

9.1. Conclusion

Overall the finding of this study showed that quality of care is inadequate:

Structure

- All health facilities in the assessment have electric power and water; but do not have easily accessible toilet, shower, water and soap for hand washing
- Inadequate parenral antibiotic, anticonvulsant and antihypertensive drug availability
- Among studied health facilities only one health center and one Hospital give all BEmONC and CEmONC signal functions respectively

Process

- Inadequate initial assessment of delivering women and low level of Respectful Maternity Care was provided
- Inadequate Infection Practices, especially very low hand washing practice before any procedure
- For most women partograph was filled incomplete and most newborn not kept in skin to skin contact with their mother
- Knowledge of delivery care providers shows low mean knowledge score.

Out come

- The overall satisfaction of delivery services in this study is found suboptimal.

In summary quality administration demands several strategies; thus it is fundamental to identify the problems, aiming at implementing effective actions, and monitoring the processes. The findings from this assessment would assist in improving the quality of delivery service in other similar settings by indicating areas need improvement.

9.2. Recommendation

- The health facility administrators shall work on health care financing system that enabled health facilities to retain and utilize their revenue for solving health facilities' priority problems (deficit structural inputs), like drugs and supplies availability, easily accessible toilet and hand washing with soap.

- FMOH and nongovernmental organizations shall work strengthen the BEmONC signal functions and training on respectful and compassionate care
- To further bridge the quality gaps in competency of care providers, responsible stakeholders might need to consider tailoring competence based in-service short courses on priority maternal and neonatal conditions.
- This study has certain limitation and quality improvement is never ending journey therefore further studies are valuable for the improvement of findings and maternal and neonatal health services

10. References

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Annexes

Annex 1. Information Sheet, Consent Form and Questionnaire for Women

Greetings, My name is_____

This is to give you information regarding a study designed to assess quality of institutional delivery service in Bishoftu town in collaboration with Addis Ababa University School of Public health. The aim of the study is to generate evidence on quality of service The study will have a benefit in the effort to improve the quality service by the stakeholders and can influence decision makers.

Data will be collected using interview. The client has the right for partial or non-participation for the data collection. By participating in this research project you may feel that it has some discomfort specially on wasting your time (about 30minutes) but there is no risk in participating in this research project. Participants in this study will receive benefit by contributing for the outcomes of the study that will be beneficial in improving the quality of delivery service that is being provided by public health institutions and confidentiality of the respondent will be maintained as the name is not required on the questionnaire.

Informed Consent

This is to respectful requesting you to participate on this study. You can have full control to take time to understand and decide whether or not to take part on the study. Your privacy will also be protected and no one will know your answer You are also not obliged to answer a question you don't want to and you may end the interview at any time you want to.

I also request you to answer it candidly because your answers are like one important piece of brick in the whole research and determine the outcome of this study. Thank you very much for your willingness to listen to me. In case, if you have any question you can ask

Contact address:-Tigist Mekonin, **cell phone:**+251-911-097279

Do you have any question that you want to ask us about the study?

With due understanding of the aforementioned information, Are you willing to participate in the study? (Yes): ☐ => Proceed (No): ☐ => Stop

Questionnaire for the Assessment of Quality of Delivery Services at Public Health Institution in Bishoftu Town, Oromia Region, Ethiopia

Name of the interviewer: _____ Signature _____ Date __/__/_____ Name of the supervisors: _____ Signature _____ Date __/__/_____	
Identifiers	
Q1.Nameof facility_____	Q2. Interviewer code_____
Q3. Respondent Code [___|____|___]	Q4: Today's date (day/month/year)_____ Time interview started: Min [____] Time interview completed: Min [____]
Q5. Progress of questioner 1. Completed 2. Partially completed	

I. General Information

Questions		**Response**	**Remark**
Socio Demographic variable			
01	Age	_____ years	
02	Residence	1. Urban 2. Rural	
03	What is your current marital status?	1.Single 2.Married 3. Divorced 4. Widowed	
04	What is your religion?	1.Orthodox Christian 2.Catholic 3.Protestant 4.Muslim	

		5.Other (Specify)-------	
05	What is your ethnicity?	1.Amhara 2.Oromo 3.Tigre 4.Guragie 5.Other (specify)----	
06	Occupation	1. Privately employed 2. Government 3. Own business 4. Un employed 5. Daily laborer 6. Student 7. Other(sp_____)	
07	Level of educational status	1. Illiterate. . . . . 1 2. Read and write. . . . . .2 3. Primary (1-6) . . . . . 3 4. Secondary (7-10). . . . . 4 5. Preparatory (11-12) . . . . . 5 6. Technical/Vocational. . . . . .6 7. College/university. 7	
08	Household Income per month / expenditure	_____birr	
Part II Client Characteristics			
09	Is this your first baby?	1. Yes (skip Q.010) 2. No	

010	Number of children alive	_____	
011	Did you plan to have this pregnancy?	1. Yes 2. No	
012	Did you have attended ANC during current pregnancy?	1. Yes 2. No	
013	Number of ANC visit?	1. Only one 2.Two visits 3. Three visits 4. Four and more	
014	Duration of labor, estimated	_____hrs	
015	Payment for drug is it free?	1. Yes 2. No	
016	Mode of delivery of current child	1. Spontaneous (SVD) 2. Instrumental (vacuum, forceps) 3. Operative delivery	
017	Outcome of the newborn in current delivery	1.Live 2.Died	

II. Satisfaction survey

Glossary: *1 =highly dissatisfied, 2= dissatisfied 3=Neutral 4. Satisfied 5= highly satisfied*

Questions		Response				
		1	2	3	4	5
Health facility structure:						
018	Availability of drugs					
019	Availability of sufficient number of staff					
020	Accessibility of ambulance					
021	Availability of adequate delivery coach					
022	Availability of clean delivery coach					
023	Cleanliness of the room					
024	Room light and ventilation					
025	Accessing your own bed that is large enough for safe co-bedding with your child					
026	Access to latrine and hand washing facility near to post natal room					
Provision of adequate and accurate information						
027	On giving answer to your questions with positive attitude					
028	The health professionals speak to me in a language that I can understand					
029	Midwifes/Nurse explaining well and listening careful to client					
030	explain about progress of labor and Complication that occurs during labor and delivery					
031	Information about vaginal and physical examination					
Privacy						

032	On availability of proper curtains/screens					
033	On privacy of your communication with the health worker					
034	On position of the bed away from doors or windows (not in front of them)					
035	On windows and doors closed and do not allow others to see any procedure					
Timeliness						
036	The admission procedure was good, no delay					
Treating client respectfully						
037	On services provided without discrimination					
038	On the health provider called you by your name					
039	On the health provider greeted you and your companions before service delivery					
040	On the health workers treated y you well without depending on some personal attribute					
041	On your companions were allowed to enter delivery room during delivery					
042	On your consent was requested for all procedures performed					
043	On your allowance to practice cultural rituals in the facility					
044	On your non physical abuse status of women in labor					
Staff competency						
045	Perceived capacity of delivery attendant					

Annex 2. Basic services, Staffing and Physical structure

	Describe the system in place, including existing back-up systems	**Any problems in availability of service during the last year?**	**If any problem, describe**
	Power	Yes: ___ No: ___	
	Water	Yes: ___ No: ___	
	Staff type	**Total Number**	
	Obstetricians		
	Integrated emergency surgery officers		
	Neonatologists or pediatrician		
	Non specialist medical doctors		
	Laboratory technologist and technician		
	Pharmacist and Druggist		
	Midwives		
	Nurses		
	Other clinical Staff (specify): _____		
	Basic services		
	No. of deliveries in the last year period		
	No. of Caesarean Section operations in that period		
	Parenteral antibiotics for maternal sepsis given in last 3 months?		
	Parenteral oxytocic given in last 3months in this		

	facility?		
	Parenteral anticonvulsant for PE/E given in last 3 months in this facility?		
	Manual removal of placenta performed in last 3months at this facility?		
	Removal of retained products of conception performed using MVA in the last 3months in this facility?		
	Assisted delivery performed in the last 3 months in this facility?		
	Neonatal resuscitation performed in the last 3 months in this facility?		
	Blood transfusion performed in the last 3 months in this facility?		
	Hygienic conditions	score	Comment
	Room is clean with no visible soil Toilets and washing areas are clean and warm Waste are collected properly		
	Soap for hand washing		
	Easily accessible water for hand washing		
	Beds are adequate		
	Each mother has her own bed that is large enough for safe co-bedding with her infant • Beds are safe, clean and well maintained Bed linen is provided by the hospital		
	Hygiene facilities are accessible and adequate		

	Easily accessible facilities • Adequate number and type of toilet • Adequate number and type of showers • Adequate sources of water for hand washing Hot water available continuously		

Annex 3. Obstetric Care Provider's Observation Checklist

1=performed, 2=not performed, 3=unsatisfactory

Time observation started_____

End time of observation_____

Obstetric care provider's observation checklist		**1**	**2**	**3**
Initial Assessment				
1	Staff listen to the woman and take an accurate history			
2	Maternal and fetal conditions are appropriately assessed, including observations of vital signs, abdominal palpation and auscultation of fetal heart			
3	A vaginal exam is offered if the woman appears to be in labour			
Privacy				
4	Women's privacy is respected with curtains/screens			
5	Bed is positioned away from doors or windows (not in front of them)			
6	On windows and doors closed and do not allow others to see any procedure			
Information				
7	The woman is informed about the purpose of every procedure and her consent is sought			
8	At every step the women is informed on progress of labor			
9	Staff introduce themselves to the woman			
10	Staff listen to the woman's preferences and involve her in decisions surrounding her care			
Infection prevention				
11	Staff wash their hands with soap and water before assisting with birth			

12	Staff wash their hands with soap and water after assisting with birth			
13	Staff use sterile gloves during birth			
14	Staff use gloves while disposing of waste			
15	Staff use sterile instruments			
16	Removes apron and wipes with 0.5% chlorine solution			
17	Disposes of all contaminated waste in leak proof containers			
18	Disposes of all sharps in puncture proof container immediately after use			
19	Family not asked for handling biological waste			
Labour support				
20	At least one birth companion of her choice is encouraged to remain with women constantly during labour and birth to provide support			
Role of Professionals				
21	There is at least one professional staff member present during labour and birth			
22	staying present at women side as much as possible			
23	working in cooperation with the labour support companion			
24	actively offering oral fluids and light food			
25	encouraging voiding as needed			
Partograph				
26	Partograph is used			
27	The WHO partograph with a four-hour action line is used			
28	A protocol/standard/algorithm for the appropriate use of the partograph is available			

Data Collection And Use				
29	Patient information			
30	Foetal heart rate			
31	Moulding			
32	Cervical dilatation			
33	Descent of head			
34	Uterine contractions			
35	Oxytocin, medicines, IV fluids			
36	Maternal blood pressure, temperature, pulse, urine			
Place And Use				
37	Partograph is placed near the labouring woman			
38	Partograph is filled before intervention			
39	The use of partograph supports labour management interventions			
Care during first stage				
40	Women are free to walk and encouraged to choose different position			
Vaginal Examinations				
41	Woman consent is sought and an explanation of its purpose is given before a vaginal examination			
Care during second stage				
42	Once the woman is fully dilated, staff wait until she feels the spontaneous urge to push			
43	Second stage duration is calculated from the start of active pushing			
Perineum Guarding - Ritgen's Maneuver - Hands On Hands Off				

44	Two techniques can be used to facilitate spontaneous birth: the 'hands on' technique (guarding the perineum and flexing the baby's head) or the 'hands poised' technique (with hands off the perineum and baby's head, but ready to intervene)			
Episiotomy				
45	Episiotomy is not routinely performed			
46	Local anaesthesia is given for episiotomy			
47	Where an episiotomy is performed, it is a mediolateral episiotomy			
Third stage management				
48	The third stage of labour is defined as prolonged if: not completed within 30 minutes of the birth of the baby with active management			
Active Management				
49	Active management of third stage is appropriately performed giving oxytocin 10 IU IM after expulsion of shoulders or within 1 minute after birth of baby			
50	Controlled cord traction is routinely performed			
51	Uterine massage is routinely performed			
Other Measures To Prevent Post Partum Hemorrhage				
52	Midwife or skilled birth attendant check fundus and contraction of the uterus after the placenta is delivered			
53	Placenta and membranes are inspected for completeness after birth			
Fourth stage - early puerperium management(Initial assessment of the newborn baby and mother–infant contact)				
54	Women should be encouraged to have skin to skin contact with their babies as soon as possible after the birth			

55	The newborn is immediately placed in skin to skin contact with their mother and dried within the first 30 seconds after birth			
56	In the first minute after birth the assessment of gestational age, start of breathing, tone and reactivity, and presence of major malformations is carried out whilst the baby is skin to skin with the mother			
57	Umbilical cord is clamped after at least one minute unless there is an immediate clinical need to clamp early			
58	Mothers and babies remain in skin to skin contact and are not separated for routine procedures (weighing, bathing, dressing) for a minimum of one hour (irrespective of feeding choice) and until after the first breastfeed"			

Annex 4. Standard Drugs and Equipment to Give EmONC

Standard drugs and equipment	Score
Parenteral Drugs	
At least one antibiotics	
Ampicillin	
Chloramphenicol	
Metronidazole	
Gentamycin	
Others	
At least one anticonvulsants	
Magnesium Sulphate	
Diazepam	
Others	
At least one Antihypertensive	
Hydralazine	
Labetalol	
Methyldopa	
Other Antihypertensive	
At least one Oxytocic's	
Oxytocin	
Ergometrine	
Misoprostol	
Prostaglandin E2	
At least one type of Intravenous (1) fluid	
Ringers Lactate	
Normal saline	
Dextrose	
Other IV Fluids	
Availability of Diagnostic Equipment	

BP apparatus	
Stethoscope	
Thermometer,	
Urine dipstick for protein	
Pantograph	
Vacuum Extraction /Forceps Delivery Sets	
Vacuum Extraction with different Size	
Forceps Delivery Sets	
Vaginal Speculum (Sims)	
Sponge (ring) forceps or uterine packing	
Essential Newborn Care Items	
Disposable cord ties or clamps	
Towel or blanket to wrap baby	

Annex 5. Information Sheet, Consent Form and Providers knowledge assessment questions

Greetings, My name is_____

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Do you have any question that you want to ask us about the study?

With due understanding of the aforementioned information, Are you willing to participate in the study? (Yes): ☐ => Proceed (No): ☐ => Stop

Date _____

Name and signature of data collector _____

Provider's knowledge assessment questions

Instruction: Choose the correct answer

1. How do you know when a pregnant woman is in labour?
    a. Dilation of the cervix
    b. Regular uterine contractions
    c. Discharge of blood and mucus
    d. Breaking of the waters/ruptured membranes
2. What do you monitor when a woman is in labour?
    e. Foetal heart beat
    f. Dialation of the cervix
    g. Maternal blood pressure
    h. Uterine contractions
    i. Maternal pulse
    j. Maternal temperature
    k. Descent of the head
    l. Colour of amniotic fluid
    m. Degree of moulding
3. What are the steps of AMTSL?
    a. Immediate oxytocin
    b. Controlled cord traction
    c. Uterine massage
4. What do you look for when a woman arrives with or develops heavy bleeding after birth?
    a. Sign of shock
    b. Sign of anemia
    c. Retained products
    d. Amount of external blood
    e. Damage to the genital tract

f. Whether uterus is contracted

5. What do you do when a woman arrives with or develops heavy bleeding after birth?
   n. Call for help
   o. Perform rapid evaluation
   p. Massage uterus
   q. If shock present immediate resuscitation
   r. Give oxytocin 10 units IM
   s. Catheterize the bladder
   t. Check to see if placenta has been expelled and completeness
   u. Examine the cervix, vagina and perineum for tears
   v. Provide specific treatment for specific cause
   w. After bleeding controlled determine hemoglobin
6. How do you diagnosis birth asphyxia?
   a. Depressed breathing
   b. Floppiness
   c. HR<100
   d. Central cyanosis
7. What are Immediate and essential newborn care?
   a. Clean child birth and cord care
   b. Thermal protection
   c. Early and exclusive breast feeding
   d. Initiation of breathing and resuscitation
   e. Eye care
   f. Immunization
   g. Identification and management of sick newborn
   h. Care of preterm and or low birth weight

የመረጃ ገለጻ፣ የፍቃደኝነት መጠየቂያ ቅጽ እና ጥያቄዎች

ሰላምታ

ስሜ ----------እባላለሁ

ይህ ከ አዲስ አበባ ዩኒቨርስቲ የህብረተሰብ ጤና ሳይንስ ትምህርት ክፍል ጋር በመተባበር በቢሾፉቱ ከተማ የመንግስት ጤና ተቆዋማት ላይ የወሊድ አገልግሎት ጥራት ዳሰሳ ላይ ለሚደረገው ጥናት መረጃ ለመስጠት ነው፡፡

የዚህ ጥናት አላማ የወሊድ አገልግሎት ተጠቃሚዎች እና ሰጪ በሚሰጡት መረጃ ላይ ተንተርሶ የወሊድ አገልግሎት የጥራት ጉዳዮች ላይ መረጃ ለመስጠት ነው፡፡ ይህ ጥናት የሚመለከተው አካል የአገልግሎት ጥራት ለማሻሻል ለሚያደርጉት ጥረት እንዲሁም ለውሳኔ ሰጪዎች ጥቅም ይኖረዋል፡፡

ለዚህም በመጠይቅ ይሰበሰባል፡፡ በዚህ ጥናት ውስጥ በሚሳተፉበት ወቅት ውድ ሰዓትዎን እስከ 30 ደቂቃ ሊያጠፉ ይችላሉ፤ ለዚህ ጥናት መሳካት ካለው ጥቅም አንጻር በትዕግስት ይሳተፉሉ ብለን እናምናለን፡፡ በዚህ ጥናት በመሳተፍዎ ሊደርስብዎት የሚችል ምንም አይነት ጉዳት የለም፡፡ በዚህ ጥናት የሚሳተፉ ሰዎች በቀጥታ የሚያገኙት ጥቅም አይኖርም፡፡ የጥናቱ ግኝት በተዘዋዋሪ የጨቅላ ሕጻናት እንክብካቤ ክፍልን የሚሰጠውን አገልግሎት ጥራት ያሻሽላል፡፡

የሚጠየቁት አገልግሎት ሰጭም ሆነ ተጠቃሚ በከፊል ወይም ሙሉ በሙሉ ላለመሳተፍ መብት ያላቸው ሲሆን የመረጃው ሚስጥራዊነት የሚጠበቅ ይሆናል፡፡ለዚህም የተጠያቂ ስም መጻፍ አያስፈልግም፡፡ በጥናቱ ላይ መሳተፍ ምንም ጉዳት ወይም ስጋት አያስከትልም፡፡

የፍቃደኝነት መጠየቂያ ቅጽ

ስለዚህ በዚህ ጥናት ላይ እንዲሳተፉ በትህትና እጠይቃለሁ፡፡ጥናቱን ጊዜ ወስደው መረዳት እና ለመሳተፍ ወይም ላለመሳተፍ መወሰን የራስዎ መብት ነው፡፡ አንዳንድ ጥያቄ መመለስ ካልፈለጉ የማይገደዱ ሲሆን መጠይቁን በፈለጉ ጊዜ ማቆም ይችላሉ ሆኖም የእርሶ ትብብርና ትክክለኛ መልስ ቢሰጡን ለጥናቱ ጠቃሚ ይሆናል፡፡ በታማኝነት እንድትመልሱ እጠይቃለሁ ምክንያቱም የእርሶዎ መልስ ለዚህ ጥናት አላማ መሠረት ነው፡፡ ይህንን መረጃ ለማዳመጥ ላሳዩኝ ፍቃደኝነት ከልብ አመሰግናለሁ፡፡

የበለጠ መረጃ ከፈለጉ የጥናቱ ዋና ተጠሪ ትግስት መኮንን በዚህ አድራሻ ማግኘት ይችላሉ፡፡

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ከላይ የተገለጸውን መረጃ በመረዳት በጥናቱ ላይ ለመሳተፍ ፍቃደኛ ነዎት?

አዎ ☐ ከሆነ ይቀጥሉ አይደለም☐ ከሆነ ያቁሙ

በቢሾፉቱ ከተማ የመንግስት ጤና ተቆዋማት ላይ የወሊድ አገልግሎት ጥራት ዳሰሳ

የጠያቂው ስም_____ ፊርማ_____ ቀን__/__/_____ የድጋፍ ሰጪ ስም_____ ፊርማ_____ ቀን__/__/_____	
ገላጭ	
ጥያ 1/የጤና ተቁዋሙ ስም	ጥያ 2/ የጠያቂው መለያ ----------
ጥያ 3/ የተጠያቂው መለያ ---------- መጠይቁ የተጀመረበት ሰዓት ---------- ያለቀበት ሰዓት----------	ጥያ 4/ የዛሬ ቀን ----------
ጥያ 5/ የመጠይቁ ሂደት 1. ሙሉ በሙሉ የተሞላ 2. በከፊል የተሞላ	

1. አጠቃላይ መረጃ

ጥያቄ		መልስ	አስተያየት
ስነ ህዝብና ማህበራዊ መጠይቅ			
001	እድሜ	---------- አመት	
002	ነዋሪነት	1. በከተማ 2. በገጠር	
003	የጋብቻ ሁኔታ	ነ.ያገባ 2. ያላገባ 3. የተለያዩ 4. ባል የሞተባት	
004	የእምነት ሁኔታ	ነ. ኦርቶዶክስ 2. ካቶሊክ 3. ፕሮቴስታንት 4. እስልምና 5. ሌሎች	
005	ብሄር	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌላ----------	
006	የመተዳደሪያ ስራ	ነ. የግል ተቀጣሪ 2. የመ/ሰራተኛ	

		3. የግል የንግድ ስራ 4. ስራ የለለው 5. የቀን ሰራተኛ 6. ተማሪ 7. ሌላ----------	
007	የትምህርትደረጃ	1. .ያልተማረ ----------1 2. ማንበብ እና መጣፍ የሚችል---2 3. 1ኛ ደረጃ (1-6)----------3 4. 2ኛ ደረጃ(7-10)----------4 5. ፕሪፓራቶሪ(11-12)----------5 6. ተክኒክ እና ሙያ----------6 7. ኮሌጅናዩኒቨርሲቲ----------7	
008	የቤተሰብ ወር ገቢ	_____	
የእናቶች መረጃ			
009	ይህ የመጀመሪያ ልጅዎ ነው?	1. **አዎ** (ወደ ጥያ. ቁጥር 011) 2. አይደለም	
010	በህይወት ያሉ የልጆች ብዛት	----------	
011	በምን ወለዱ	1.በመሀ ፅን 2. በመሳሪያ 3. በኦፐራስዮን	
011	እርግዝናዉ የተፈለገ ነው?	1. **አዎ** 2. **አይደለም**	
012	የወሊድ ምርመራ አድርገዋል?	1. **አዎ** 2. **አላደረኩም**	
013	ስንት ጊዜ ቅድመ ወሊድ ምርመራ አድርገዋል	1. ከ 4 በታች 2. 4 እና ከ 4 በላይ	
014	ምጡ ምን ያህል ጊዜ ቆየ	1. < 12 ሰዓት 2. 12-24 ሰዓት 3. > 24 ሰዓት	
015	መድሀኒት ከክፍያ ነጻ ነው	1. **አዎ** 2. **አይደለም**	

016	የልጁ ሁኔታ	ነ.በህይወት አለ 2. ሞታል 3. ሌላ ችግር----------	
017	ልጁ የሞተነት ምክንያት	ነ. በአተነፋፈስ ችግር 2. በእትብቱ ምክንያት 3. በተፈጥሮ ችግር	

የእርካታ መጠይቅ

መፍቻ በጣም አለመርካት 1 አለመርካት 2መካከለኛ 3 መርካት 4 በጣም መርካት 5

ጥያቄ		መልስ				
		ነ	2	3	4	5
018	በቂ መድሀኒት መኖር					
019	በቂ ባለሙያ መኖርን በተመለከተ					
020	አምቡላንስ በተፈለገበት ጊዜ ማግኘት					
021	በቂ የመዉለጃ አልጋ መኖር					
022	የመዉለጃ አልጋ ንፅህናን በተመለከተ					
023	የክፍሉ ንፅህናን በተመለከተ					
024	ክፍሉ ውስጥ በቂ ብርሃንና አየር ዝውውር መኖር					
025	በቂ አልጋ ናትራስ ልጅን ከእናት ጋር ማስተኛትን በተመለከተ					
026	የሽንት ቤት እና የእጅ መታጠቢያ ከመኝታ ክፍሉ አቅራቢያ መኖር					
ትክክለኛ እና በቂ መረጃ መስጠትን በተመለከተ						
027	በጥሩ አመለካከት ለጥያቄዎት መልስ መስጠት					
028	የጤና ባለሞያዎቹ በምረዳዉ ቋንቋ መጠቀምን በተመለከተ					
039	የጤና ባለሙያዎቹ በትህትና ያናግሩን እና ይሰሙን ነበር					
030	የጤና ባለሙያዎቹ ስለምጡ ሂደት እና እየተፈጠረ ለነበረዉ ሁኔታ ያብራሩነበር					
031	የጤና ባለሙያዉ/ዋ ስለሚደረገዉ መሀጠን ምርመራ መረጃ ይሰጡን ነበር					
ሚስጥራዊነቱን ስለመጠበቅ						

032	በቂ መጋረጃ/መሸፈኛ ነበር					
033	ከጤና ባለሙያዉ/ዋ ጋር የሚያደርጉት ንግግር ሚስጥራዊነቱን ለመጠበቅ አመቺ ቦታ ስለመኖሩ					
034	የአልጋዉ አቀማመጥ ከበር እና ከመስኮት ራቅ ያለ					
035	በር እና ከመስኮቶቹ የተዘጉና የማያሳዩ ስለመሆናቸዉ					
የጊዜ አጠቃቀም						
036	በማስተናገዱ ሂደት የሚወስደው ጊዜ በተመለከተ					
ከጤና ባለሙያዎች ጋር ስለነበርዎት ግንኙነት ልምድና ስላገኙት እንክብካቤ						
037	አገልግሎቱ ከአድሎ ነፃ ስለመሆኑ					
038	የጤና ባለሙያዎቹ በአገልግሎት ወቅት ሲያናግሩኝ በስሜ ይጠሩኝ ነበር					
039	የጤና ባለሙያዎቹ የሕክምና አገልግሎት ከመጀመራቸዉ በፊት ሰላምታ አቅርበዉልኝ ነበር					
040	የጤና ባለሙያዎች ከኔ ጋር በተያያዙ ምክንያቶች (አለባበስ፤አነጋገር፤የመኖሪያ ቦታ ወዘተ) ሳይመለከቱ በደንብ ያስተንግዳሉ					
041	በወሊድ ወቅት ድጋፍ ሰጪ ወይም ዘመድ ወደ ማዋለጃ ክፍል እንዳስገባ ተፈቅዶልኝ ነበር					
042	የጤና ባለሙያዉ/ዋ ስለሚሰጠኝ አገልግሎት ያስረዳኝ ነበር					
043	በጤና ተቓሙ ባህላዊ ስነስርአቶችን (ቡና ማፍላት፤ገንፎ ማዘጋጀት ወዘተ) እንድፈጽም ተፈቅዶልኛል					
044	በወሊድ ወቅት በተለያየ ምክንያት በጥፊ/ነቁንጥጫ መትተዉኛል					
የባለሙያ ብቃት						
045	የጤና ባለሙያዎች ብቃት በተመለከተ					

Unkaa Ibsii itti keenamuu, Fedhiin itti gaafatamuu fi Gaafilee

Nagaa Gaafachuu

Maqaan Koo _____ Jedhama

Kuni univarsiitii Addis Ababati kuta fayyaa hawassa waliin ta'uun dhabiile fayyaa mootuuma magaala Bishooftuu keesa jirran irrati qulquliini tajaajila dahumsaa ogeesa fayyaatiin keenmuu qoachuuf ibsa keenuuf.

Kayoon qoanoo kana ibsa fadamtooni tajajjila dahumsaa tiifi ogeyeyooni fayyaa kenan irra kau'un qulqulina tajjajilaa irrati yaada keenuuf.Qoanoon kuni qaama qulquliina tajjajila foyyeesuufiis ta'ee qaama murtii keenuuf fayyidaa guuda qaba.

Qo'anoo kana keesatii hirmachuu keesaniin yeroo keesan hanga daqiiqa 30 issinjalaa fudhachuu danda'a.Yaata'u malee fayyidaa qo'anoo kanaa yoo illalu hinhirmaataan jeneeti yaadna. Qo'anoo kanaa keesaati hirmaachuu keesaniin midhaan kamiyuu issin irra hinga'uu. Qo'anoo kanaa keesaati hirmaachuu keesaniin fayyidaa offiikeesaniin argataan hinjiiru; garuu garra anbiiraatiin duaatii hadholee fi daa'imaan reef dhalatee hanbiisuu keesatii gumachaa gudaa qabduu.

Qo'anoo kana keesaatii akka hirmaatan kan filamtaani hundi gutuuman guututii ta'ee ciinaati mirrga hirmachuu diduu qabdaan. Hiciitiin qo'anoo kanaa gutuuman guututii kan eegamee dha. Maqaan keesan hin baraa'uu. Qo'anoo keessatii hirmachuun rakoo homaa issiin irra hingeesiisu.

Unkaa Fedhiin ittigaafatamu

Qo'anoo kana keesatii akka hirmaatan kabajaan issin gaafadha. Yeroo fudhatanii qo'anoo kana keesatii hirmachuu fi hirmaachuu dhiisuun mirrga keesan. Gaafilee deebii issanii keenu hinbarbadnee yoo jiiraatan irra darbuu dendeesan. Kanamaleesi gafiilee bakka barbaadaniiti adda kutuu dendeesan;garuu hirmaanan keesaan qulquliina tajaajiila fiduu keesatii fayiida gudaa qaba.Yaadaa keesaan iffaan akka naaf keeniitan issin gaafadha sababnii issas deebiin keesaan kayoo qo'anoo kanaatiif bakka gudaa qabaa. Fedhii Ibsaa kana dhageefachuuf agersiistaniif baayeen issin galeeteefadha.

Ibsaa kamiiyuu yoo barbaadan qo'anoo kana kan gageesiitu Addee Tiigiist Makooniin dubiisuu dendeesu

Lakk Bill. +251- 911- 097279

Ibsaa issinii keenamee irra kaatanii qo'anoo kana keesatii hirmaachuuf fedhii qabduu?

Eyyee ☐ Miitii ☐

Qo'anoo qulquliina dahuumsaa ilaalciisee Dhaabilee fayyyaaMagaala Bishooftuu Keesa jiirani irrati gegeesamu

Maqaa gaafataa _____ Malatoo_____ Guyyaa__/__/_____ Maqaa deegaraa _____ Malatoo_____ Guyyaa__/__/_____	
Ibsa	
1/Maqaa Dhabilee fayyaa	2/Koodii Gaafata ----------
3/Koodii Gaafatama ----------	4/Guyyaa ---------- Sa'aa Gaafiin ittii eegalame ---------- Sa'aa Gaafiin itti dhuumatee----------
5/ Haala Gaafiilee 1. Guutuma guutuuti kan guutamee 2. Kan cinaan guutamee	

I. Ibsa Waliigalaa

Gaafiilee		**Deebii**	**Yaada**
Haala Hawaasumaa			
01	Umrii	Wagaa_____	
02	Bakka Jireenya	1. Magaala 2. Baadiyaal	
03	Haalii heeruma keesanii maal fakkata?	1.Hinheerumne 2.Heerumme 3. Adda deemeen jirra 4. Abban mana koo du'ee jirra	
04	Amantiin keesaan maali?	1.Ortoodoksii 2.Katoolikii 3.Proteestaantii 4.Musliima 5.Hanbiraa (Ibsii)-------	

05	Sanyiin keesan maali?	1.Amaaraa 2.Oromoo 3.Tigree 4.Guraagee 5.Hanbiraa (Ibsii)-------	
06	Hojiin keesan maali?	1. Kandhunfaa 2. Kanmootuuma 3. Daldalaa 4. Hojii hinqabu 5. Hojatuu Guyyaa 6. Baratuu 5.Hanbiraa (Ibsii)-------	
07	Sadarkaa Barnootaa	1. Hinbaranee . . . . . 1 2. Dubisuu fi bareesuu . . . . . 2 3. Sadarkaa 1ffa (1-6) . . . . . .3 4. Sadarkaa 2ffa (7-10). . . . . .4 5. Preparatoorii (11-12) . . . . . ….5 6. Tekiniikaal/vokashiinaal. . . . . .6 7. Kooleejii/uniivarsiitii. 7	
08	Galiin keesaan ji'aan	Qarshii _____	
Haala fayadamaa tajajjilaa			
09	Kunii da'iima keesan kan duraatii?	1. Eyee (Gaafi.013 irra darbii) 2. Miitii	
010	Ijoolee lubuun jiiraan meeqa qabduu?	_____	
011	Ulfa kana ittii yadanii turtanii?	1. Eyee 2. Miitii	

012	Tajjajiila Kunuunsa dauumsaa duraa dhabiilee fayyaati hordoofaa tuurtanii?	1. Eyee 2. Miitii	
013	Tajjajiila Kunuunsa dauumsaa duraa yeroo meeqa gootan?	1. Yeroo tokko 2.Yeroo lama 3. Yeroo sadii 4. Yeroo afuurii fi issa oli	
014	Tilmaamaan ciimimuun sa'a meeqa issin irra turee	Sa'a_____	
015	Kafaltii qoriichaaf kafaltaan nijiiraa?	1. Eyee 2. Miitii	
016	Akkamiin deesan	1. Nafsaalaa tiin 2. Meshaa walansaa tiin 3. Baqaaqsanii deesiisuun	
017	Bu'aan da'uumsaa maal fakaata	1.Da'imtii lubuun nijiira 2. Da'imtii lubuun hinjiira	

II. Haala Tajaajiilaan Gamaduu

Hubanoo: *1 =Bayee itti hingamanee 2= itti hingamanee 3=deei hinqabu 4.ittigamadee 5= Bayee ittigamadee*

Gaafiilee		Deebii				
		1	2	3	4	5
Haala dhabilee fayyaa:						
018	Dheyeesiin Qorichaa					
019	Ogeesii gahaa nijiraa					
020	Ambuulaansii dhiyoon argachuu illalchise					
021	Siree dahuumsa gahaan jirrachuu illalchisee					

022	Qulquliin siree dahumsaa					
023	Qulquliin kutaa dahumsaa					
024	Iffaa gahaa fi qileensa qulquluu argachuu					
025	Sireen dahuumsa booda issinii fi dai'ima keesan ciifsuuf gahaa dhaa					
026	Kutaa dahuumsaa boodaati dhiyooti mana fincaanii fi dhiqanaan harka nijiira					
Odeefanoo Gahaa Argachuu illalchisee						
027	Gafiilee keesaniif deebii gahaa ta'ee niargetuu					
028	Ogeesooni fayyaa qooqa issiin galuun issin duubisaani					
029	Ogeesooni issin deesiisaan ibsaa gahaa ta'ee issini kenuu					
030	Yeroo ciimiimu fi da'uumsaa haala ciimimmu fi da'umsaa akkasumaas rakko issin qunamuu irratii ibsa issini keenu					
031	Qoranoo nafsaalaa tiis ta'ee kanbiraa yoo issiniif godhaan ibsaa isiniif kenuu					
Iciitii Eeguu						
032	Magaarajaan gahaa niijira					
033	Wa'ee fayyaa keesanii mariiachuu irrati icitiin nieegama					
034	Sireen dahuumsa foodaa ykn ulaa irraa adda jiraa					
035	Ulaanni fi foodaan qamnii keesan akka himulaneetii cuufamanii jirru					
Yeroo Illalchiisee						
036	Tajaajiila daftanii argatanii					
Tajajjilamaa Kabajuu Irrati						
037	Tajaajiila Adda qodiinsa malee keenama					
038	Ogeyyooni fayyaa maqaa keesaniin issin waamanii					
039	Ogeyyooni fayyaa issiniifi namootii issin walliin jirran tajaajilaa kenuun dura nagaa niigaafatuu					

040	Ogeyyooni fayyaa tajjajjilaa barbaachiisaa ta'ee hundaa fayyidaa issin irra osso hinbarbaadiin issini keenuu					
041	Namnii issini waliin jiruu kutta dahumsaa issini walliin akka galuu nihayemaammaafii					
042	Tajjaajiila kamiyuu yoo issiini keenaan hayama keessan gaafatanii jiruu					
043	Dhabiilee fayyaatii akka aada keesaniiti wanta barbaadan akka gootan issini hayyamama					
044	Yeroo da'uumsa keesanii qaama keesan irratii midhaa geessisu illalchiisee					
Dendeetii Ogeeyii						
045	Dendeetii ogeesaa fayyaa issin deesiise illalchiisee					