

WOMEN'S SATISFACTION ON MATERNITY WAITING HOME IN JIMMA ZONE,  
OROMIA, SOUTH WEST ETHIOPIA.

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A RESEARCH THESIS SUBMITTED TO DEPARTMENT OF HEALTH, BEHAVIOR AND SOCIETY, FACULTY OF PUBLIC HEALTH INSTITUTE OF HEALTH, JIMMA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH (MPH) IN HEALTH PROMOTION AND BEHAVIOR.

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JIMMA, ETHIOPIA

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## **Abstract**

**Background:** Maternity waiting homes have been documented in the scientific literature since the 1960s. It is residential facilities where women who live remotely can wait before giving birth at a hospital or health center where obstetric care is available. Maternity waiting home was introduced in Ethiopia in 1985 to increase institutional delivery and reduce maternal & neonatal mortality.

**Objective:** To determine women's level of satisfaction on maternity waiting home and identify associated factors in Jimma zone, south west Ethiopia, 2018.

**Methods:** The study was conducted in three selected Districts of Jimma zone [Manna, Seka and Kersa], Oromia, south west Ethiopia, by using community based cross-sectional study design. Total number of women's used maternity waiting home services was identified, and then sample size was proportionally allocated for each district. By using the record of women's who used MWH from December 2016 to March 2018 as a sampling frame, our study unit was randomly selected. Data was collected using structured questionnaire, by five diploma holder Nurse, guided by Health developmental Army to visit the house of the selected study unit and conduct the interview. Data was analyzed using SPSS version 21.0 statistical software. And correlation analysis was performed between each satisfaction dimension and overall satisfaction. Simple and multiple linear regressions were performed to identify predictors of overall satisfaction. Variables with  $p < 0.05$  at 95% CI, in multiple linear regression were taken as a predictor of satisfaction.

**Results:** A total of 362 mothers participated in the study making a response rate of 98%. The overall women satisfaction level with Maternity Waiting Home service was 68.97%. Satisfaction was reported to be higher with social support (One to five support (89.5%), Husband support (89%)) and cleaner/servant support working in Maternity waiting home (88.9%), lower satisfaction was reported with the Recreational service (38.5%), Food services (49.4%) and satisfaction with utensils in maternity waiting home (56.2%). Final predictors of women's satisfaction with Maternity waiting home were: length of stay in MWH less than forty days ( $B=1.040, p=0.020$ ), utensils in MWH ( $B=0.199, p < 0.001$ ), prenatal service ( $B=0.249, p=0.001$ ), food service ( $B=0.113, p < 0.001$ ), family support ( $B=0.102, p=0.019$ ), sanitation service ( $B=0.202, P < 0.001$ ), recreational service ( $B=0.179, P < 0.001$ ), Husband support ( $B=0.200, P < 0.001$ ), IPC with HCWS ( $B=0.038, P=0.002$ ), 1 to 5 support ( $B=0.082, P < 0.001$ ), servant support ( $B=0.197, p < 0.001$ ) were statically significant with overall satisfaction.

**Conclusion:** women's overall satisfaction with their stay in MWH in study area was 68.8%. Food service, recreational service, ambulance service and utensils in MWH were major sources of dissatisfaction; while social support (husband support, family support and one to five support), IPC with Health care provider, HEWs support and servant or cleaners support working in MWH were a major sources of satisfaction. Length of stay in MWH, utensils within MWH, prenatal service, food services, family support, sanitation service, recreational service, husband support, IPC with HCWs, HEWs support and servant or cleaner support were significant predictors of women's satisfaction.

**Key words:** Level of satisfaction, Maternity waiting home, Women

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## **List Of Abbreviations Acronomymys**

ANC-----	Ante natal care
EDHS -----	Ethiopian Demographic and Health Survey
FMoH-----	Federal Ministry of Health
HC-----	Health center
HSDP-----	Health Sector development program
MCH-----	Maternal child health
MHS-----	Maternal health services
MMR-----	Maternal mortality rate
MWH-----	Maternity waiting home
PNC-----	Postnatal care
SBA -----	Skilled birth attendant
SDG-----	Sustainable development goal
U5MR-----	Under five Mortality rate
UNICEF-----	United nation international children emergency fund
WHO-----	World Health Organization

## CHAPTER ONE:INTRODUCTION

### 1.1.Backgtround

Maternity waiting home is residential facilities where women who live remotely can wait before giving birth at a hospital or health centre where obstetric care is available. The first maternity waiting homes were intended for women with major obstetric abnormalities for whom operative delivery was anticipated but whose homes were in remote and inaccessible rural areas. Gradually the concept has been enlarged to include "high risk" women, including those expecting their first delivery, women with many previous births, very young women, older women, and those identified as having problems such as high blood pressure during pregnancy. Thus, the aim of implementing a maternity waiting home strategy is to reduce maternal and prenatal mortality by improving access to skilled birth attendance and emergency obstetric care, particularly for women in rural and remote areas (1).

In Africa one of the early experiments with maternity waiting homes (known as "Maternity Villages") was in Eastern Nigeria in the 1950s. The rural nature of the population meant that a trip to the hospital during labor often entailed a journey of many miles, usually on foot. In maternity waiting areas that had been developed in small buildings adjacent to a district hospital high-risk women were housed for the last 2-3 weeks of pregnancy(2). In Uganda where similar houses were instituted in the 1960s recorded maternal deaths in one remote area fell by half once such a maternity waiting area was instituted(3)

Maternal waiting home provides skilled delivery and postnatal care, referrals in case of complications, counseling for maternal and newborn care including nutrition and early initiation of breastfeeding, family planning and social services including community awareness of existing maternity waiting homes, income generation activities, gender awareness and support for domestic and gender-based violence. It also increases institutional deliveries and consequently decrease maternal mortality caused by the delay in reaching obstetric care (4).

Maternity waiting home is introduced in Ethiopia to increase institutional delivery and reduce maternal & neonatal mortality starting from 1985. Attat hospital in Gurrage zone, the oldest hospital in Ethiopia to introduce the implementation of maternity waiting home and it serves for admission of 642 mothers utilizing MWA during 2010GC. The major indication for admission at

that time was a previous caesarean section history 166 (25.9%), twins/mal presentations 95 (14.8%), preeclampsia/medical reasons 86(13.4%) and previous stillbirths 84 (13.1%) accounted for the admission (5).

The current expansion of MWHs to rural health centers of Ethiopia is a breakthrough to bridge the geographic barriers and access to skilled care(6). Ethiopia has developed implementation MWH guideline so that maternity waiting homes services standardize across the country where pregnant mothers in areas with difficult transportation, will stay as their due date of delivery(usually 15 days before due date) is approaching in order to get safe delivery. Ambulance service, prenatal service, postnatal services, food service, sanitation service and recreational service were those services recommended by the guide line that every health centers implementing maternity waiting homes across the country should deliver these services for women's staying in MWH. The waiting home shall be administered by a board represented from the community, health center staff, and district health office with responsibility to evaluate and review its budget and activities every three month. In addition, in this guideline it was clearly stated that, this board has to visit and ask mothers every six months in order to ensure their satisfaction regarding the services by reviewing and evaluating through a random selection of mothers in the waiting houses(7)

## **1.2. Statement of the problem**

Globally, the maternal mortality rate fell by nearly 44% over the past 25 years, to an estimated 216 maternal deaths per 100 000 live births in 2015, from an MMR of 385 in 1990. The annual number of maternal deaths decreased by 43% from approximately 532 000 in 1990 to an estimated 303 000 in 2015. Developing regions account for approximately 99% of the global maternal deaths in 2015, with sub-Saharan Africa alone accounting for roughly 66%. As of 2015, the two regions with highest MMR are sub-Saharan Africa (546 to 652) and Oceania (187 to 381). Ten countries account for nearly 59% of global maternal deaths of which Ethiopia is one of them with contribution of 11 000 death per 100,000 live birth by 2015(8).

Increasing institutional deliveries is important in reducing maternal and neonatal mortality. However access to health facility in rural areas is more difficult than urban areas because of distance, inaccessibility and lack of appropriate facilities (9). Although institutional delivery has

been promoted in Ethiopia home delivery is still common (73%), primarily in hard to reach areas. Even though institutional delivery increased from 10% in 2011 to 26% in 2016 nationally, only 21% of rural women have skilled birth attendants compared to urban women 80 %(10).

Utilization of MWH will increase mothers' satisfaction with delivery service by creating home like environment, breaking distance barrier to access health facility during labor and by building good relationship between service provider and mother. Distance, Antenatal care attendance, utilization of MWH service and wanted status of the pregnancy, were significant predictors of mothers' satisfaction with the service(11).

Despite all its uncountable benefits the commonest factors that challenged to use MWH were, no one to care for children at home (68 %),families were also not able to bring the woman with food items and could not continuously supply with food from far areas; they had concerns that the woman might not have the necessary meals every day(50%) ,lack of awareness about the importance of MWHs (49%), husband did not allow (32 %), women did not perceive the need to stay at the MWHs(28 %), transportation to and from the MWHs (26%),cultural and family issues that deter women from being admitted to the MWHs and problems with transportation to and from the MWHs (10%)(6).

Maternal and newborn mortality including complications like a uterine rapture and still birth rate can be substantially reduced when women are admitted to MWHs. The use of MWHs has the potential to reduce prenatal mortality in rural areas with low geographic access to hospitals. There is also evidence that MWH can reduce maternal death and infant mortality. Example in Nigeria MWH reduced maternal mortality ratio from 10 per 1000 deliveries to less than one per 1000 deliveries & stillbirth rate from 116 per 1000 deliveries to 20 per 1000 deliveries. In Malawi it reduced maternal mortality in the area to be zero. In Eritrea also 49% increased in health center births after the introduction of a maternity waiting home (12, 13, 14).

Even though the implementation of Maternity waiting home services spent more than 30 years in Ethiopia there is no even a single research done yet on whether users are being satisfied or not on maternity waiting service. Therefore as long as there is a service there should have to be an indicator which shows us whether we are on the truck delivering the services as standard or as users are expected which plays a crucial role in both utilization and sustainability of the program

or the services; specifically in my case MWH services. Therefore hence service utilization as well as continuity of services is highly depends on users satisfaction; assessing women's satisfaction status on MWH services is mandatory.

### **1.3. Significance of the study**

Studying implementation of maternity waiting home services from client perspective will provide systematic information for service providers, decision makers, local planners and other stake holders that help understand how well the services is functioning according to clients' perception, and what changes might be required to meet clients' expectation as well as to increase utilization of service by the target population .

Therefore this study is expected to provide evidences that the level of women's satisfaction have on utilization of maternity waiting home in Jimma Zone, South West Ethiopia, because the continued success of an MWH heavily depends on whether clients satisfied with and will utilize the homes and if they are satisfied with their experiences. Hence there is insufficient literature on women's satisfaction with MWH in Ethiopia, this study result will help us to know the current satisfaction of MWH services on users' perspective that plays role in efforts to tackle maternal and child morbidity and mortality during pregnancy and beyond. Furthermore for sustainability of MWH program. In addition we hope that findings of this study will also be used by local planners and decision makers to find true quality of maternal waiting home services on clients' perspective and design an intervention plan. It can also serves as both knowledge generation and program improvement purpose, open door for other researchers to conduct further studies as well.

## CHAPTER TWO: LITRATURE REVIEW

### 2.1. level of satisfaction

Maternity service satisfaction is multidimensional, with various dimensions of service and care contributing to the experience: accessibility, interpersonal aspects of care, the physical environment, and care outcomes are some of them according to study done in woliyita sodo among women attending public health facility for delivery, women's were least satisfied with the technical aspects of care including the medical facilities, competency of the care provider, opportunity to clarify doubts about care, and health advice on caring for newborns. But they were reasonably satisfied with the interpersonal aspect of care: privacy maintained during care, encouragement and politeness, courtesy, and respect by care providers during delivery.(15)

The literature support these, mothers satisfaction on their length of Hospital stay revealed that respondents educational level and age matters the level of satisfaction they have towards the services they received from health care providers; Mothers with secondary level of education and hospital stay more than 48 hours were more likely to be satisfied with the health care where as those below secondary educational level were less likely to be satisfied with the health care. Additionally Mothers in the age group 25-29 and 30-34 years were more likely to have satisfaction with providers' attitude as compared to the 15-19 years groups.(16)

According to research done in Mekele on patient satisfaction and associated factors among those admitted in gynecological wards during their stay place of residence is significant determinant of satisfaction. Participants who live in rural area were 2.39 times more likely satisfied as compared to participants live in Urban. Participants who stayed in the ward less than four days were 56% times more satisfied, as compared to those who stayed 4-7days (17). Another study done in Jimma zone also indicate that mothers' age was significant predictor of their satisfaction with the service, those whose age is less than 20 and mothers 20-34 years of age were more likely to be satisfied compared to those within 34-49 years of age group. The other important predictor of mothers' satisfaction with institutional delivery service was distance; mothers who reside in 30 minute walking distance radius to the HC are 10.48 times more likely to be satisfied by institutional delivery service compared to those living above 90 minute walking distance radius(11).Another study done in Asella Hospital indicated that Educational status of the

respondents was also a significant predictor of maternal satisfaction that respondents who had no higher education were more satisfied than those who had diploma and above. Regarding monthly income, mothers whose monthly income were less than 500ETB and 500-1000ETB were two times more satisfied than those greater than 1000ETB and respectively(18).

## **2.2. Factors affecting satisfaction**

According to study done in Malawi among women staying in MWH, the majority of mothers said that they felt very uncomfortable in dressing in their rooms in the MWH because there was no privacy. People were always going in and out during the day. In the night they usually had adolescents sleeping in the same room with the antenatal mothers(19). According to study done in Mekele participants who report they're feeling on ways privacy assured were 6.32 times more likely satisfied than whom measures were not taken to assure privacy.(17)

According to study done in Zambia, Respondents who had used MWHs are not happy during their stay that in maternity home there is no beds or mattresses and pregnant women had to bring their own beddings from home. They mentioned that those who failed to carry their own beddings and mattresses had to sleep on the floor. Similarly, they stated that there is a limited space for sleeping; it is very crowded because pregnant women came with an accompanying relative. They explained that sometimes women had to sleep outside because of the lack of space. Another important issues is that makes mothers un happy with their stay was that there was the lack of food for pregnant women when staying in the MWHs they mentioned that food was not provided to the pregnant women who stayed in the MWHs, women had to carry their own food from home. Additionally, respondents who had used MWHs not happy that it was usually unknown how long women would stay at the MWHs(20).Waiting time to be seen by health care providers is predictor of maternal satisfaction. Participants who wait shorter time than longer time to be seen by a care provider were more satisfied by delivery service. Concerning Privacy measures, participants who reported privacy were 7 times more satisfied than their counter parts(18).

According to study done in Amhara region the researchers found that distance and cost incurred for service to be associated with mothers' dissatisfaction. Health facility distance related

satisfaction (51.4%), and amount of cost paid related satisfaction .As mothers who paid less than or equal to157 ETB were more satisfied than those who paid greater than157 ETB(21).

According to study done in Ethiopia (four regions;Amhara, Oromia, SNNP&Tigray), Women who were not provided food items during their stay in MWHs were not happy. They claimed that this created an additional burden on their families by forcing the family members to stay with the woman at the MWH and help prepare food or else having them to regularly travel long distances to deliver food, which meant additional expenses. The lack of cooking utensils was also another worrying factor which exposes them because this meant the families had to bring their own, which was usually a difficult task. The same study identified that interaction with other pregnant women at the waiting home, presence of television for their recreation, the presence of a clean and green facility compound were some of those things made them comfortable and satisfied. They also happy with the excellent experience of doing tasks together such as cooking their meals. Absence of caretakers for children at home (68%), husband and family did not allow admission (53%), dearth of transportation to and from the MWHs (26%), and families unable to bring the woman food items and unable to continuously supply food by traveling far distances (19%), Staying for a long period without delivering was another challenge women faced at the MWH and are issues that makes mothers worry during their stay in MWH(6).

According to study done in Liberia the physical characteristics of MWH that allow mothers in MWH to get restful and sound sleep, Reassurance focused on the encouragement and comfort women got from knowing a skilled birth attendant, clean environment and educational program that makes them learn from each other and health care providers, makes their stays to be satisfactory and memorable event in their life. Additionally, women staying at the MWH were described that MWH helps them to feel free and not be occupied by their daily activities of work, family, cooking, and child rearing. Overall, these depictions paint a picture of a facility that provides many areas of satisfaction including a restful and supportive environment. However, there are still areas for improvement, especially in necessary resources such as potable water and adequate food and lighting available at the MWHs as well as activities to combat loneliness(22).

According to study done in Kalamo district of Zambia, women's are not happy during their stay in maternity waiting home with availability of water at the MWHs, women had to walk long



distances to get water both for drinking and washing, sanitation of home was poor there is no supervision (20).

Another study done in Malawi on women experience during their stay in maternity waiting home also revealed, cleanness of Maternity waiting room as well as toilets were areas where women's were not satisfied with.(19).Cleanliness of class where women were admitted post delivery was also recorded as significant predictor of satisfaction(11)

According to study done in Bong country Liberia, MWH users has satisfied and happy with how health care providers welcomed and treated them on their arrival and during their stay(23).

According to study done in Nairobi, Provider empathy was more strongly associated with satisfaction among women with complications compared to those without complication, but the quality of counseling was no longer significant and odds of satisfaction were greater with interpersonal communication client had with health care provider, care received and supportiveness of health care providers(24).

A study done in Malawi found out that mothers in MWH were not satisfied with the behavior of the midwives in MWH. The interpersonal relationship between the mothers and the midwives was reported as bad and mothers were not happy in general with their relationship with health care providers the midwives did not come to the MWH to check on the antenatal mothers or assess them(19).

According to study done in Kenya the women who had experienced the MWH explained that the way health care providers handle mothers in MWH is not good and it is also difficult for them to convince other mothers and invite them to use maternity waiting home recommended that the nurses and doctors should frequently check the women using the facility, and proposed renovation of the showers and toilets and provision of activities or entertainment to help pass the time, such as income-generating or skill-development activities(25).

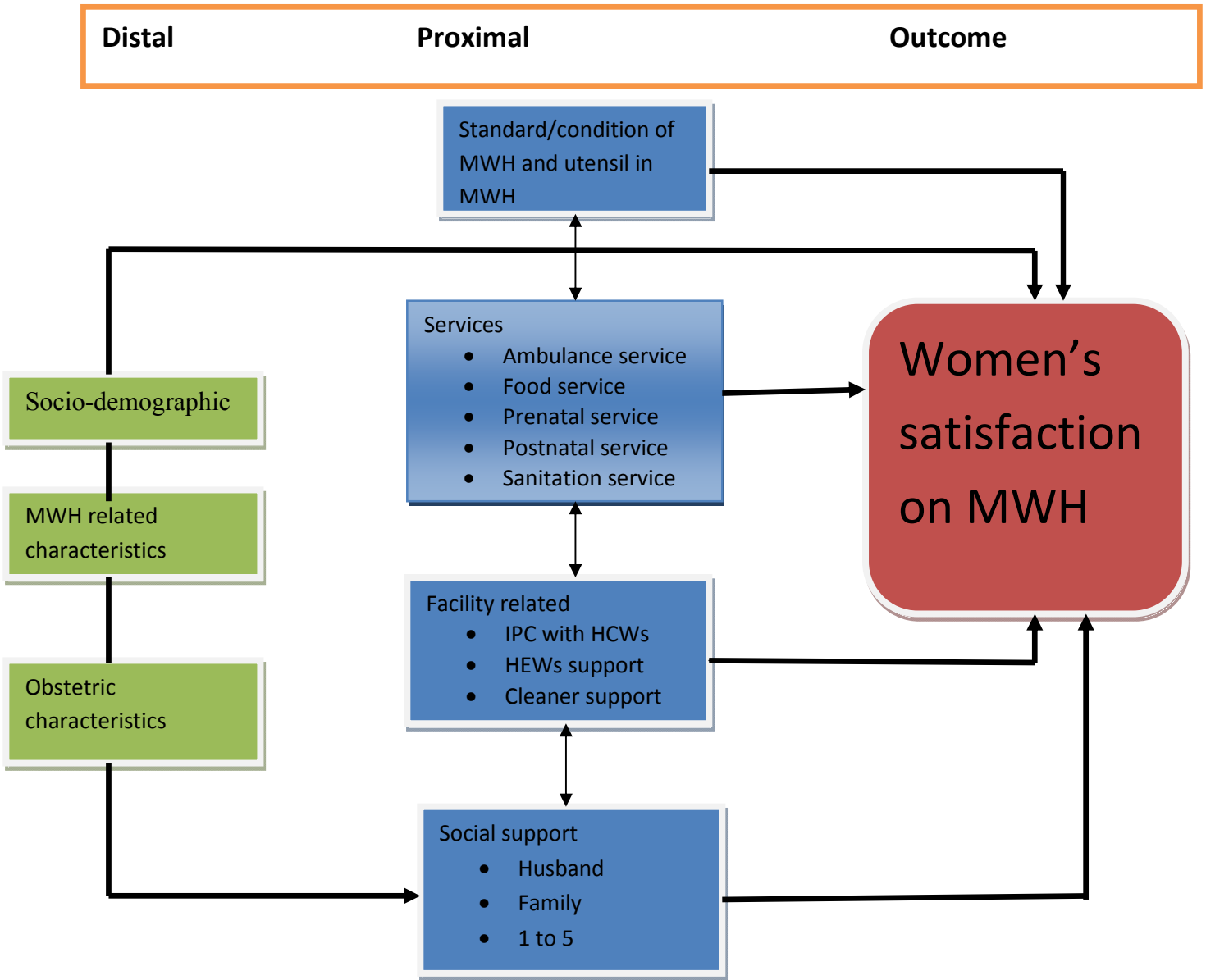
Institutional based cross sectional study done Addis Abeba revealed that, clients seem to have higher satisfaction on communication with health care providers with overall satisfaction rate of 88.6% and 91%, but the complete satisfaction rate contributing only 26% and 20.3% respectively. Explanation of the patients' problem to the patient, information and counseling to

the patient on discharge, explanation about examination or procedure to be done, and information to the patient on drugs prescribed to the patient has yielded a general satisfaction rate with decreasing order; 66.9%, 60.4% , 46.3% and 25.3%. This study also has demonstrated that client satisfaction is largely influenced by the quality of client-care provider relationship(26).

Another study done in Jimma zone Omo Nada wereda also showed that privacy of delivery care was the major predictor of patient satisfaction. Respondents' satisfaction with cleanliness of the delivery room in which the delivery was conducted was 56(14.3%) Strongly satisfied and 266(65.3%) satisfied. But Considerable number of mothers were not satisfied with availability of water; 142(36.3%) and 21(5.4%) were not satisfied and Strongly not satisfied with water supply in the Health centers they have received institutional delivery service. Besides, more than quarter of mothers were not satisfied and strongly not satisfied with the distance of HC from their residence, whereas about 117(45.5%) mothers were satisfied and 96(29.9%) of them are neither satisfied nor dissatisfied (11)

### 2.3. Conceptual framework

For this particular study conceptual frame work was developed after reviewing maternal waiting home National guideline developed by Ethiopian federal ministry of health(7).



**Figure 1:** Conceptual frame work developed based on maternity waiting home national guideline.

## **CHAPTER THREE:OBJECTIVES**

### **3.1. General objective**

- ✓ To assess women's satisfaction on Maternity Waiting Home in Jimma zone, Oromia, south west Ethiopia, 2018.

### **3.2. Specific objectives**

- ✓ To assess women's level of satisfaction on MWH services in Jimma zone, Oromia regional state, south west Ethiopia, 2018.
- ✓ To identify factors associated with women's satisfaction on MWH services in Jimma zone, Oromia regional state, south west Ethiopia, 2018.

## CHAPTER FOUR: METHODS AND MAATERIAL

### 4.1. Study area and period

The study was conducted in three selected districts of Jimma zone (Manna, Seka and Kersa), Oromia, south west Ethiopia. Manna district is found on the west of Jimma Town, Kersa on the East and Seka on the South, around 22, 18 and 22 km away from Jimma Town respectively. According to 2010EC demographic data each district (Manna, seka and kersa) have a total population of 196718, 279346 and 221978 with 6826, 9693 and 8302 pregnant women respectively. A total of 13 health centers have functional MWH services for each wereda, Accordingly, Manna district has 5 HC, Kersa, 5HC and Seka 3HC with functional MWH service, making a total of 13 HC with functional MWH services within the three selected district. And there are 38 possible kebeles in catchment areas, 15 kebeles for Manna wereda, 13 kebeles for kersa wereda and 10 for seka wereda. The study was conducted from March to April, 2018.

### 4.2. Study design

Community based cross sectional study design was used to assess women's Level of satisfaction on Maternity waiting home service.

### 4.3. Population

#### 4.3.1. Source population

- ✓ Women within the three selected districts of Jimma zone, who ever used maternity waiting home.

#### 4.3.2. Study population

- ✓ All randomly selected women within the study area who used maternity waiting home services from December 2016 to march 2018.

### 4.4. Inclusion and exclusion criteria:

**Inclusion:** All women who used maternity waiting home services during December 2016 to March 2018.

**Exclusion:** Women who are unable to respond, those who are critically ill during the time of data collection and those women who partially used were excluded.

## 4.5. Sample size determination and sampling procedures

### 4.5.1. Sample size determination

The sample size was determined by using single population proportion formula considering the following parameters:-

P= (proportion of mothers satisfaction during their stay in MWH) as50%

$Z_{(1-\frac{\alpha}{2})}$  = Z-score at 95% confidence interval = 1.96

d= Acceptable margin of error (precision of measurement) = 5%

The Possible Non-response rate=10%

The formula for calculating the sample size (n) is:

$$n = \frac{\left(Z_{\left(\frac{\alpha}{2}\right)}\right)^2 P(1 - P)}{d^2}$$

$$n = \frac{(1.96)^2 0.5 (1 - 0.5)}{(0.05)^2}$$

$$n = 384$$

Since source population is less than 10,000 corrective formulas was used to calculate the final sample.

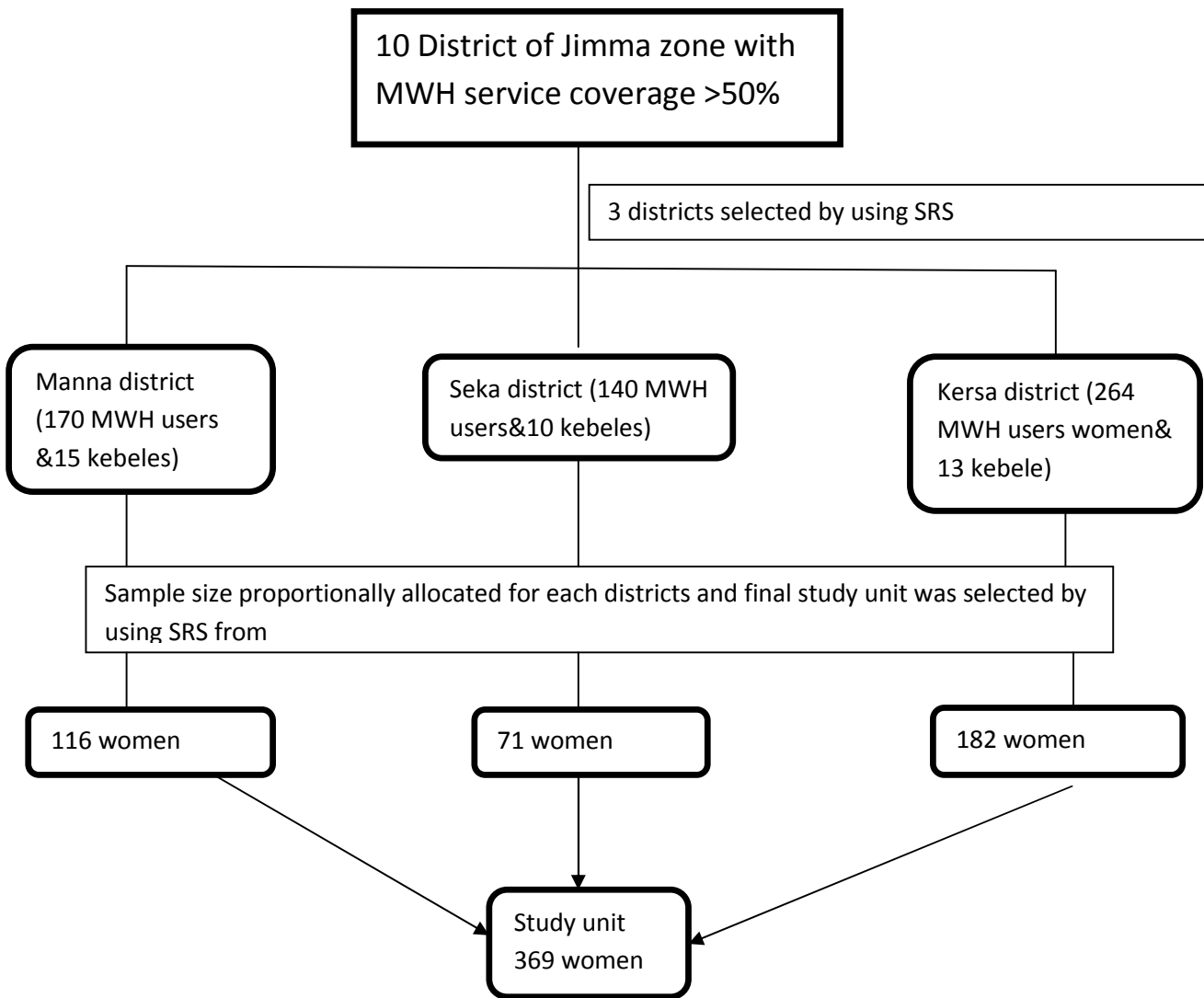
$$n = \frac{384}{1 + \frac{384}{538}} = 224 \text{ Where; } N=538.$$

By considering a 10% non-response rate, sample size becomes 246.

Hence there is issue of design effect the final sample size was  $246 * 1.5$ , which is **369**

#### 4.5.2. Sampling procedure

Three Districts (Kersa, Seka, and Manna) were selected using simple random sampling from 10 District of Jimma zone those which have MWH coverage of more than 50. A total number of women's who used maternity waiting home from December 2016 to March 2018 was identified (N=538). Then sample size was proportionally allocated for each district based on their respective number of maternity waiting home users. Then final study participant were selected randomly by using simple random sampling from the record of women's who used MWH as a sampling frame. (See fig 2).



**Figure 2:** Graphical representation of study sampling procedure

## **4.6. Study variables and measurement**

### **4.6.1. Dependent variable**

- ✚ Women's satisfaction with maternity waiting home services.

### **4.6.2. Independent variable**

**Socio-demographic and economic characteristics** :(Age, Marital status, Educational status, Occupation, Religion, Ethnicity Monthly income).

**Obstetric related variable** :(Parity, history of delivery, history of complication, previous place of delivery)

**MWH history related variables** :( Length of stay, person Accompany, History of MWH)

### **Dimension of satisfaction**

- ✚ Standard of the house,(How MWH constructed, utensils in MWH)
- ✚ Services(Food,prenatal,postnatal, sanitation and recreational)
- ✚ IPC with HCWs
- ✚ HEWs support
- ✚ Servant/cleaner serve

### **4.6.3. Measurement**

The item of each satisfaction dimension were scored on three(3) point likert scale ranging from Not satisfied(1) to satisfied(3),satisfaction score was calculated for each satisfaction dimension by summing items per each dimension and divided for possible highest score based on number of item each dimension have,then the total score was converted to 100 percent. Satisfaction score was declared based on converted mean score.

## **4.7. Data collection tools**

Data were collected by using pretested structured questionnaire; developed after reviewing Maternity waiting Home National guideline. First questionnaire was developed in English then translated into Afan Oromo before data collection. It consists of the following parts:-



First socio-demographic and economic characteristics part contains items, which helps to assess Age, Marital status, Educational status, Occupation, Religion, Ethnicity and Monthly income. Second Obstetrics and maternity waiting home history which contains: Parity, Previous place of delivery Length of stay, person accompany, history of MWH)

The third part of questionnaire is Satisfaction dimension which include: satisfaction with standard of MWH, satisfaction with utensils in MWH, satisfaction with services (Food services, prenatal services, postnatal services, sanitation services, recreational services), satisfaction with social support (husband support, family support and one to five support), satisfaction with IPC with HCWS, HEWs support and Satisfaction with Cleaner or servant support, satisfaction level was measured by using four three point likert scales ranging from not satisfied to not satisfied. Each of the response was scored as 'Not satisfied'=1, 'Not sure'=2, and 'satisfied'=3,

#### **4.8. Data collection method**

Five diploma Nurse data collectors and two supervisors with Bsc in public health officer who spoke Afan Oromo were deployed for data collection. Based on the address retrieved from record of facility, data collectors were visited the house of selected women guided by Health extension workers. Data was collected using face-to-face interview method by data collectors who have good command of local language and have previous experience of data collection in health field.

#### **4.9. Data quality control**

The quality of data was controlled starting from the time of questionnaires preparations. Prior to data collection pretest was also done on in Goma wereda, Gembe H/C on 18 women's (5% of sample size). Training was conducted for data collectors on the purpose of study and procedures of data collection for one day prior to the day of data collection. Close supervision was done by the principal investigators and supervisors throughout the data collection period. Collected data was checked for completeness and consistency of responses on daily bases. First each dimension against its item was looked for reliability tests, as we use items based on guideline. When the reliability test advised us for exclusion of some more items to increase reliability, we assumed the dimension to have another aspect to be treated differently. Then were accommodative to have another sub-dimension to be compiled under the initial dimension and closely, consistent name

was allotted to them. For example standard of the facility was sub-categorized as, “construction” and “Utensils” that we all assumed under standard initially. (Table: 1)

**Table 1:** Reliability test for each satisfaction dimension

<b>Satisfaction dimension</b>	<b>chronbach’s alpha</b>
<b>Standard of MWH</b>	
Satisfaction with construction of MWH	0.74
Satisfaction with utensils in MWH	0.79
<b>Services</b>	
Satisfaction with prenatal service	0.82
Satisfaction with postnatal service	0.90
Satisfaction with food service	0.99
Satisfaction with sanitation service	0.85
Satisfaction with recreational service	0.78
<b>Social support</b>	
Satisfaction with husband support	0.91
Satisfaction with family support	0.86
Satisfaction with one to five support	0.98
<b>Satisfaction with HEWs support</b>	0.98
<b>Satisfaction with IPC with HCWs</b>	0.95
<b>Satisfaction with servant support</b>	0.98

#### **4.10. Data processing and statistical analysis**

Epi-data version 3.1 was used for data entry and then exported to SPSS version 21.0 statistical package for further analysis. Descriptive statistics were computed to describe respondents by demographic characteristics, obstetric characteristics and maternity waiting home history of respondents. The correlation between each and overall satisfaction were assessed using Pearson’s correlation coefficient. Simple and multiple linear regression analysis were applied to see significance of association between dependent and independent variables. All independent variables with p-value less than 0.25 were included in multiple linear regression model using backward stepwise method to determine the independent predictors of satisfaction. The variables with  $p < 0.05$  in multiple linear regression model were considered as significant predictors of satisfaction on MWH service.

#### **4.11. Operational Definition**

- **Satisfaction:** The extent to which women's need was met in relation to standard of MWH, utensil in MWH, service being provided in MWH, Social support and IPC with HCWs HEWs support and relationship with servant in MWH. Satisfaction items were scored on three point liker scale ranging from 1 to 3(1=not satisfied, 2=not sure, 3= satisfied).To declare level of satisfaction for each domain, all items per each satisfaction domain were summed up and divided for highest possible score, then converted percentage .i.e. Mean score was computed for each satisfaction dimensions, after all items of each domain were summed up. Then the total sum score was converted to 100 percent for possible comparison of each dimensions mean.
- **Standard of MWH:-** Is a quality or standard a given MWH should have to meet as per national guideline protocol and measured by asking women, in terms of construction and condition of the home and utensils in the house during their stay in the MWH.
- **Social support:** - Is extent of support women's using MWH was granted from Her Husband, Families, one to five network or Neighbor during her stay in MWH directly or indirectly.
- **Overall satisfaction:-is** The extent to which women's need was met in a general way as per each satisfaction dimension .It was asked at the end of each satisfaction dimension to assess direct overall satisfaction women's have on each satisfaction domain and treated as outcome variable. It has 13 items with three point likert scale (1=not satisfied, 2=not sure, 3=satisfied) making the range of satisfaction score between 13 and 39.

#### **4.12. Ethical consideration**

The Ethical clearance was obtained from an ethical Review committee of Jimma University College of health sciences. Formal letter was also obtained from JU, Department of Health Behavior and Society and taken to Jimma zonal Health office. Official letter was written for each district health offices in the study area. Verbal consent was obtained from each respondent after explaining the purpose, benefit, the confidentiality, and voluntary participation features of the study.

#### **4.13. Plan for Dissemination**

The finding of this study will be presented to the Jimma University, Department of Health, Behavior and Society College of public health and Medical sciences. Copy of the research will be submitted to Jimma zone and districts covered by study. Subsequently, attempts will be to publish it on scientific journals.

## CHAPTER FIVE: RESULT

### 5.1 Socio-demographic characteristics

Of 369 respondents selected from the three weredas of Jimma zone, 362 were participated in the study, yielding 98% response rate. The mean age of respondent was 28.33 years with standard deviation(SD) $\pm$ 3.56 and more than half respondents 191(52.8%) were belonging to the age group of 25-29 years, followed by 108(29.8%) belonging to the age group of 30-34 years. Almost all (99%) respondents came from rural and 359(99.2%) were married. Regarding ethnicity and religious distribution of respondents, the predominant ethnicities 327(90.3%) are Oromo while the dominant religion 334 (92.3%) are Muslim. With regard to mothers occupation, 234(64.6%) of mothers were housewives and farmers accounting for 118(32.6%). Two hundred and fifty two (69.6%) of mothers cannot read and write followed by those who are able to read and write 109(30.1%) and also 175(48.3%) and 187(51.7%) are husbands who cannot read and write and who can read and read and write respectively. More than half (58.0%) had average family monthly income  $\leq$ 1000 ETB (Table 2).

**Table 2:** Socio-demographic characteristics of women's who used maternity waiting home and gave birth at health centers, Jimma zone, south west Ethiopia, 2018.

<b>Variable</b>	<b>Frequency (n)</b>	<b>%</b>
<b>Age in year</b>		
20-24	41	11.3
25-29	191	52.8
30-34	108	29.8
35 and above	22	6.1
<i>Mean (<math>\pm</math>SD) of Age (in year)</i>	<b>28.3(<math>\pm</math>3.56)</b>	
<b>Residency</b>		
Rural	361	99.7
Urban	1	0.3
<b>Mother's educational status</b>		
Cannot read and write	252	69.6
Read and write	109	30.1
Others*	<b>1</b>	<b>0.3</b>
<b>Husband educational status</b>		
Cannot read and write	175	48.3
Read and write	187	51.7
<b>Mother's marital status</b>		
Married	359	99.2
Divorced	3	0.8
<b>Mother's occupational status</b>		
House wife	234	64.6
Farmers	118	32.6
Merchants	9	2.5
Government employ	1	0.3
<b>Religious</b>		
Muslim	334	92.3
Orthodox	19	5.2
<b>Ethnicity</b>		
Oromo	327	90.3
Dawuro	15	4.2
Kaffa	12	3.3
Amhara	8	2.2
<b>Monthly income</b>		
$\leq$ 1000	210	58.0
$\geq$ 1001	151	42.0

\*others=high grade completed

## 5.2. Obstetric and MWH history of respondents

Among the total studied participants, the largest number 243(67.1%) had 2-4 deliveries and 13(3.8%) of women's this was the first delivery. Majority (93.6%) of women's had gave birth before and 23(6.4%) of women's does not. Two hundred thirty four (64.6%) had gave their birth apart from the recent (the one she gave in MWH) at home while 128(35.4%) of women gave birth at health facilities. Two hundred sixty three (72.7%) of women stayed in MWH for 15-21 days while sixty three(17.7%) stayed for 8-14 days, but only 29(8.0%) of respondents stayed in MWH for seven and bellow days. concerning means of transportation to reach maternity waiting home 200(55.2%) of women reach Maternity waiting home on foot, while 134(37%) of women reach by vehicle for free. Almost half of respondents and 184(50.8%) live in areas accessible for ambulance while 178 (49.2%) of respondents live in areas inaccessible for ambulance .One hundred forty two (39.2%) of women's are ever diagnosed with complication while 220(60.8%) does not. Similarly 175(48.3%) and 165(45.6%) of mothers has been alone and together with other mothers in the same postnatal room during their stay in MWH respectively. While two hundred and twenty (60.8%) of women's and 224(61.9%) of women's use MWH again and recommend it for others respectively, 142(39.2%) and 138(38.1%) of women's neither will use MWH again nor recommend it for others (Table 3).

**Table 3:** Obstetric characteristic of women's who used maternity waiting home and gave birth at health centers, Jimma zone, south west Ethiopia,2018.

Variables		Frequency	%
Parity	One	13	3.6
	Two to four	243	67.1
	Five and above	106	29.3
History of MWH	Yes	60	16.6
	No	302	83.4
Mothers place of birth apart from this recent Birth (the one she gave birth in MWH)			
	At home	234	64.6
	Health institution	128	35.4
Accompanies	Husband	260	71.8
	Family	273	75.4
	Neighbor	44	12.2
	Others*	7	2.0
Length of stay in MW	≤7dys	29	8.0
	8-14days	64	17.7
	15 -21days	263	72.7
	≥21dys	6	1.7
Mode of transportation			
	On foot	200	55.2
	Vehicle (free)	134	37.0
	Vehicle (paid)	28	7.7
Estimated walking hours			
	More than 2 hrs	15	4.1
	1hrs to 2hrs	122	33.7
	30min to 1hrs	220	60.8
	Less than 30mi	5	1.4
Area accessible for ambulance	Yes	178	49.2
	No	184	50.8
Number of mother in the same prenatal room			
	One	67	18.5
	Two	159	43.9
	≥3	136	37.6
Number of mother in the same postnatal room			
	One	175	48.3
	Two	165	45.6
	≥3	22	6.1
Use MWH again	YES	220	60.8
	NO	142	39.2
Recommend MWH for others	yes	224	61.9
	No	138	38.1

\*Others (HAD=6, TBA=1)



### 5.3. Respondents Level of satisfaction

Women’s satisfaction with different aspects of satisfaction: Standard of MWH (how MWH Constructed, utensils in the MWH), services (prenatal services. Postnatal services, food services, sanitation services and recreational services) IPC, Social support (Husband, family, one to five),HEWs support and interaction with servant or cleaner working in MWH were assessed using 112 satisfaction items that have three point Likert scale.

For each dimension, the mean score was adjusted to 100% to make uniform comparison among each scale. Accordingly the higher mean score was observed for satisfaction dimension social support, with sub dimension of: One to five supports (Mean=89.5, SD=22.5), Family support (mean=89, SD=7.3) whereas the lowest satisfaction mean score was observed for service, with sub dimension: Recreational service (Mean=38.5, SD=25.7) and Food service (Mean=49=4, SD=26.0) sub dimension. (figure3)

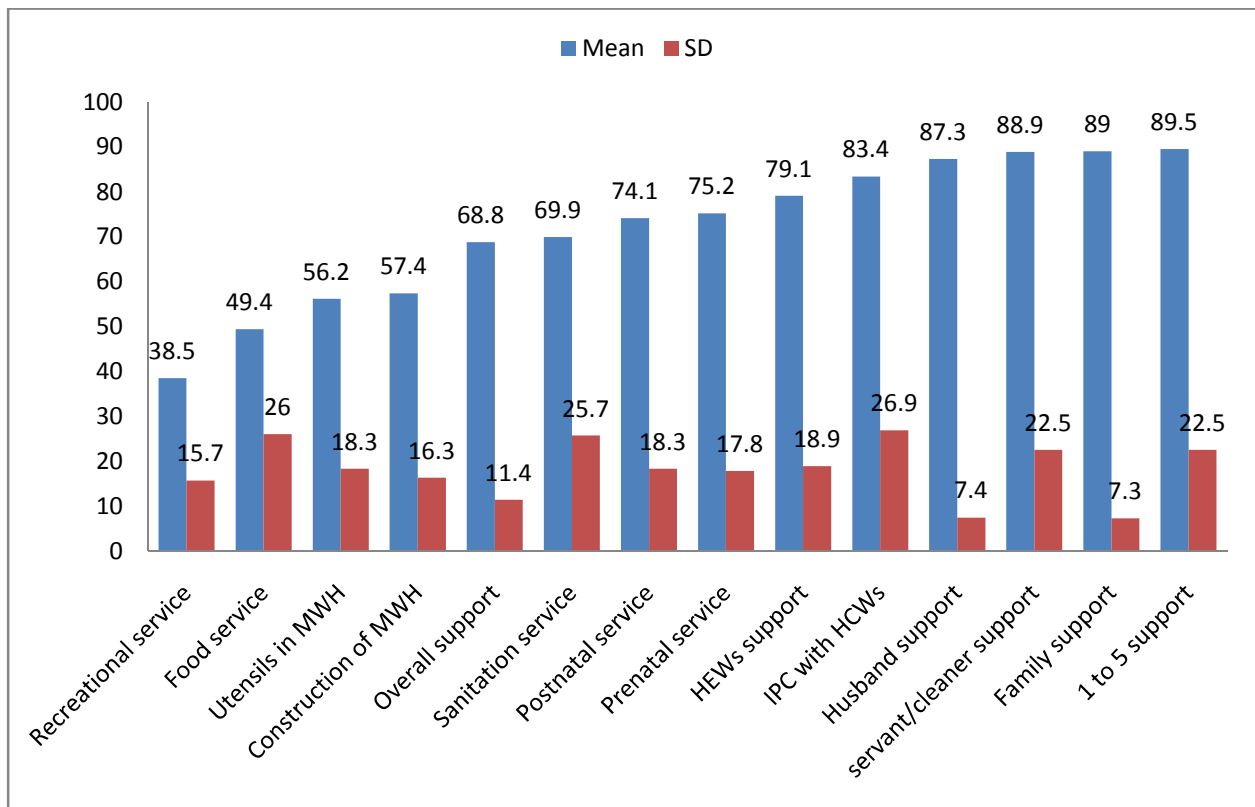


Figure 3: Respondent satisfaction level on MWH for each satisfaction dimension, Jimma Zone, South west Ethiopia, March to April, 2018(n=369)

## 5.4. Correlation analysis

### Correlation analysis between overall satisfactions and each satisfaction dimension

Satisfaction with how MWH constructed was positively correlated with all satisfaction dimension and significantly associated with sanitation service( $r=0.112, p=0.033$ ). Satisfaction with utensils in MWH was significantly and strongly associated with overall satisfaction( $r=0.627, p=0.018$ ). Ambulance service was significantly associated with prenatal service( $r=0.132, p=0.012$ ) and HEWs support( $p=0.125, p=0.017$ ). Satisfaction with prenatal service was significantly associated with husband support( $r=0.020, p=0.011$ ). Food service was positively associated with all satisfaction dimensions and strongly and significantly associated with overall satisfaction( $r=0.675, p=0.048$ ). Recreational service was positively and significantly associated with sanitation service( $r=0.104, p=0.048$ ) and strongly associated with overall satisfaction( $r=0.603$ ). Husband support was positively and significantly correlated with overall satisfaction( $r=0.121, p=0.021$ ). Satisfaction with HCWs was positively and significantly associated with HEWs support( $r=0.128, p=0.015$ ). Overall satisfaction was strongly correlated with, prenatal service( $r=0.633$ ), IPC with HCWs( $r=0.59$ ) and postnatal services service( $r=0.555$ ) (Table: 4)

Table 4: correlations between each dimension and overall satisfaction Jimma Zone, south west Ethiopia, 2018

		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14
D1	How MWH constructed	1													
D2	Utensils in MWH	.371	1												
D3	Ambulance service	0.251	-0.007	1											
D4	Prenatal service	0.159	.248	0.132* (p=0.012)	1										
D5	Postnatal service	.155	.392	-0.008	0.658	1									
D6	Food service	.160	.355	0.065	0.412	0.370	1								
D7	Sanitation service	.112* (p=0.033)	.412	0.002	0.250	0.328	0.523	1							
D8	Recreational service	.316	.346	.084	0.381	0.272	0.514	0.435	1						
D9	Husband support	.006	.076	0.068	0.020*(p=0.011)	-0.012	0.032	0.079	0.088	1					
D10	Family support	.004	.035	0.008	0.041	0.082	0.034	-0.066	0.024	0.112* (p=0.033)	1				
D11	1-5 support	0.045	.155	-0.063	0.156	0.213	0.191	0.246	0.104	0.164	0.359	1			
D12	HEW support	0.033	.131* (p=0.045)	0.125* (p=.017)	0.027	0.166	0.175	0.241	0.210	0.067	0.149	0.506	1		
D13	IPC with HCWs	0.256	.232	.079	0.496	0.476	0.319	0.111* (p=0.035)	0.312	0.019	0.062	0.128* (p=0.015)	0.229	1	
D14	Servant support	0.075	.216	-0.229	0.187	0.385	0.214	0.231	0.130* (p=0.014)	0.141	0.142	0.196	0.320	0.512	1
D15	Overall satisfaction	0.398	.627*(0.018)	0.009	0.633	0.555	0.675*(p=0.048)	0.540	0.603	0.121* (p=0.021)	0.165	0.404	0.465	0.59	0.536

\*significant at p-value 0.05

D1. Construction Of MWH  
 D2. Utensils in MWH  
 D3. Ambulance service  
 D4. prenatal service  
 D5. postnatal service  
 D6. Food service

D7. Sanitation service  
 D8. Recreational service  
 D9. Husband support  
 D10. Family support  
 D11. 1 to 5 support  
 D12. HEWs support

D13. IPC with HCWs  
 D14. Servant Support  
 D15. Overall satisfaction

## 5.5. Predictors of respondents level of satisfaction

Simple linear regression analysis was conducted to assess the association between overall satisfaction and other independent variables after checking of normality using histogram. Candidate variables from simple linear regression analysis were entered to multiple linear regressions analysis. From multiple linear regression stay in MWH less than forty days ( $B=1.040, p=0.020$ ), utensils in MWH ( $B=0.199, p<0.001$ ), prenatal service ( $B=0.249, p=0.001$ ), food service ( $B=0.113, p<0.001$ ), family support ( $B=0.102, p=0.019$ ), sanitation service ( $B=0.202, P<0.001$ ), recreational service ( $B=0.179, P<0.001$ ), Husband support ( $B=0.200, P<0.001$ ), one to five support ( $B=0.082, p<0.001$ ), IPC with Health care workers ( $B=0.038, P=0.002$ ) and servant support ( $B=0.197, p<0.001$ ) were statically significant with overall satisfaction. This means that for positive unit change in satisfaction with utensils in MWH, overall satisfaction will be averagely increased by 0.199 ( $p<0.001, CI: 0.109, 0.289$ ). As satisfaction increased by positive unit among women who stayed in MWH less than forty days, overall satisfaction will be increased by 1.040 ( $p=0.20, CI: 0.165, 0.914$ ). As For a positive unit change in satisfaction with prenatal service, overall satisfaction will be increased by 0.249 ( $p=0.001, CI: 0.101, 0.398$ ). For a positive change in respondents satisfaction with food services overall satisfaction on MWH will be increased by 0.113 ( $p<0.001, CI: 0.074, 0.152$ ). As satisfaction of respondents increase with family support, overall satisfaction respondents have on MWH will be increased by 0.102 ( $p=0.019, CI: 0.017, 0.182$ ). And also for a positive unit increase in satisfaction with sanitation service, the overall satisfaction score will be increased by 0.202 ( $p<0.001, CI: 0.120, 0.283$ ). As satisfaction on recreational service increase in a positive unit overall satisfaction will be increased by 0.179 ( $p<0.001, CI: 0.155, 0.243$ ). For a positive change in women's satisfaction with their husband support, overall satisfaction will be increased by 0.200 ( $p<0.001, CI: 0.147, 0.253$ ). As women's satisfaction on interpersonal communication with HCWs during their stay in MWH increase by positive unit overall satisfaction will increase by 0.038 ( $p=0.002, CI: 0.015, 0.062$ ). Satisfaction with HEWs support was also another predictor of overall satisfaction, as mothers satisfaction with HEWs support during her stay in MWH increase by positive unit overall satisfaction will be increased by 0.082 ( $p<0.001, CI: 0.036, 0.128$ ). As respondent's satisfaction with servant support increased by positive unit, overall satisfaction will be increased by 0,197 ( $p<0.001, CI: 0.147, 0.48$ ) (table 5)

Table 5: Factors predicting the satisfaction of women's on MWH services, Jimma zone, south west, Ethiopia,2018.

Variables	coefficients	95%CI	p-value
	$\beta$		
Age	0.046	-0.009,0.102	0.102
Past history of complication	0.967	0.035,1.899	0.425
No Past history of complication	RC	RC	RC
History of MWH	3.633	4.589,2.678	0.136
No past history of MWH	RC	RC	RC
Stayed in MWH less than 14 days	1.040	0.165,1.914	0.020*
Stayed in MWH more than 14 days	RC	RC	RC
How MWH constructed	0.149	0.068,0.229	0.534
<b>Utensil in MWH</b>	<b>0.199</b>	<b>0.109,0.289</b>	<b>0.000**</b>
Ambulance service	0.862	-0.292,0.244	0.243
<b>Prenatal service</b>	<b>0.249</b>	<b>0.101,0.398</b>	<b>0.001*</b>
Postnatal service	0.155	0.083,0.227	0.130
<b>Food service</b>	<b>0.113</b>	<b>0.074,0.152</b>	<b>0.000**</b>
<b>Family support</b>	<b>0.102</b>	<b>0.017,0.182</b>	<b>0.019*</b>
<b>Sanitation service</b>	<b>0.202</b>	<b>0.120,0.283</b>	<b>0.000**</b>
<b>Recreational service</b>	<b>0.179</b>	<b>0.155,0.243</b>	<b>0.000**</b>
<b>Husband support</b>	<b>0.200</b>	<b>0.147,0.253</b>	<b>0.000**</b>
IPC with HCWs	0.038	0.015,0.062	0.002*
HEWs support	-0.125	-0.294,0.043	0.144
<b>One to five support</b>	<b>0.082</b>	<b>0.036,0.128</b>	<b>0.000**</b>
<b>Servant support</b>	<b>0.197</b>	<b>0.147,0.248</b>	<b>0.000**</b>

\*significant at  $p < 0.05$ , \*\*significant at  $p < 0.001$

- Dependent variable=overall satisfaction
- 90.8 % of variation of satisfaction was explained by all candidate variables(R.-square)

## CHAPTER SIX: DISCUSSIONS

Different studies were conducted on MWH services availability, utilization and associated factors. This study mainly focused on the level of satisfaction women's have on MWH service. Overall satisfaction with maternity waiting home was explained by 90.8% with all candidate variables. Utensils in MWH, prenatal service, food service, families support, sanitation service, recreational services, IPC with health care workers, HEWs support, Husband support, servant support, were identified as predictors of satisfaction.

In this study 16.6% of respondents had past experiences in MWH. This result is higher than the study done in Kenya which was less than 10%(25). The difference may be because of the establishment of intercollaboration between health center and health post and presences of health extension workers working at kebele level and also women's satisfaction with health extension support during their stay in MWH was higher and significant predictor of overall satisfaction.

This study also revealed that women's satisfaction was higher in all social support satisfaction domains; namely satisfaction with one to five supports (89.5%), satisfaction with family support (89.0%) and satisfaction with husband support (87.3%) and Majority of respondents have been accompanied by family and husband while they were have been in MWH and husband was the responsible person in supporting and facilitating. And also this study revealed that as satisfaction of respondents increase in a positive unit with family support, overall satisfaction respondents have on MWH will be increased by 0.102( $p=0.019$ , CI: 0.017, 0.182). This indicate that family support for women staying in MWH directly or indirectly can contribute for women's satisfaction with her stay, that she feel easy staying in MWH. And these may be responsible for higher satisfaction with social support. This finding was consistent with study done in four regions of Ethiopia(6)

Mothers length of stay in MWH was another predictor of satisfaction, those women's who stayed forty and less days in MWH were 1.04 more satisfied than those women who were stayed in MWH more than forty days( $p=0.020$ , CI: 0.165, 0.914). The more days women's spend in MWH the more women's less satisfied with their stay. This finding is similar with study done rural district of Zambia(20). Descriptive analysis also showed that the more length of stay in MWH decrease, the more satisfied women's are.

This study also found out that utensil within MWH was significant predictor of satisfaction. As positive unit change in respondent's satisfaction with utensils within maternity waiting home, respondents overall satisfaction on MWH will be increased 0.199( $p < 0.001$ , CI: 0.109, 0.289). Overall satisfaction of respondents was also positively associated with utensils within Maternity within home. This indicate that making maternity waiting home attractive, home like environment will make women more satisfied, more missing their stay in MWH. This finding was the similar with study done in Zambia where women's were appreciating presence of utensils with maternity waiting home and the main reason why they were planned not to use maternity waiting home services again (20)

This study also revealed that food service was also significant predictor of women's satisfaction with their stay in MWH , For a positive change in respondents satisfaction with food services over all satisfaction on MWH will be increased by 0.113( $p < 0.001$ .CI:0.074, 0.152).It also positively and significantly associated with overall satisfaction in correlation analysis. This indicate that when we think of maternity waiting home services we have to pay attention on food services being rendered to those mothers staying in maternity waiting home in terms of frequency ,amount and quality as these all matters. This finding was also in line with research done in four region of Ethiopia in which food service was one of the main problem women staying in maternity waiting were suffering from and refused to stay in maternity home, creating burdens on family.(6)

This study revealed that respondent's satisfaction score with ambulance service was 24%, which is the lowest satisfaction score of all assessed satisfaction dimension in this study, descriptive analysis also shows that; even though 50.8% of respondents live in accessible areas for ambulance, only 37% of women used vehicle as means of transportation for free, which Ambulance is usually. This finding was in line with study done in rural community of northcentralLiberiawhere the barrier of distance was especially profound for many pregnant women.(23)

This study also assessed the relationship between overall satisfaction and each satisfaction dimension. All satisfaction dimension were positively correlated with overall satisfaction. Similarly, food service ( $r=.627$ ,  $p=0.018$ ), utensils within maternity waiting home( $r=0.675$ , $p=0.048$ ) and husband support( $r=0.121$ ,  $p=0.020$ ) were significantly associated with overall satisfaction, implying that in order to make change in maternity waiting home service, increase utilization and sustain the program these three areas should have to be handled seriously. These finding was in line with study done in rural Zambia in which shows that women's are willing to stay in maternity waiting home and happy with their stay if she was supplied with food services and support from family, particularly from husband(27)

### **Limitation of the study**

- The finding of this study was not discussed in detail by comparing with previous study due to absence of similar reports.
- Recall bias may have affect data because, it may be difficult for study subject to fully remember what was happened in the past one year
- Social desirability bias could have affected the quality of the data because study participant may get difficult in responding 'Not satisfied'



## **CHAPTER SEVEN : CONCLUSION AND RECOMMENDATION**

### **7.1. CONCLUSION**

Food service, recreational service, ambulance service and utensils in MWH were major sources of dissatisfaction; while social support (husband support, family support and one to five support), interpersonal communication with Health care provider, Health extension workers support and servant or cleaners support working in MWH were a major source of satisfaction. Length of stay in MWH, utensils within MWH, prenatal service, food services, family support, sanitation service, recreational service, husband support, IPC with HCWs, HEWs support and servant or cleaner support were significant predictors of mother's satisfaction with the service. Overall satisfaction was positively correlated with all satisfaction dimensions. Utensils in MWH, Husband support and Food service were significantly associated with overall satisfaction.

### **7.2. RECOMMENDATIONS**

Based on the finding the following recommendation was forwarded

#### 1. Jimma zone and Manna, Seka and Kersa Woreda health office

- ✓ Intervention on the availability of enough food and recreational service in maternity waiting home should be done.

#### 2. Health centers

- ✓ Prepare waiting home with enough room, Equipment and supply as per guideline.
- ✓ Provide enough food and avail recreational service for mothers staying in MWH.
- ✓ Assign competent health care provider those who make appropriate exact date of delivery as length of stay affect satisfaction.
- ✓ Provide sanitation service (keep cleanness of maternity waiting house and toilets).

#### 3. Researcher

- ✓ Finally, the investigator recommend further investigation should be undertaken on women's lived experience during her stay in MWH

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## QUESTIONNAIRE

Dear respondent, good morning (Good afternoon/evening). My name is ----- . We are conducting on women satisfaction towards maternity waiting home.

### **Why you are being asked to participate**

We want to learn from assess women's' satisfaction towards maternity waiting home services. Since you are a husband, you are being asked to participate because you would be in a position to provide us relevant information about study objectives. You do not have to participate; it is not your choice. If you are willing, I will proceed.

**Benefits:** Although there are no direct benefits to you at this moment, your participation will help us to find out more about maternity waiting home services and the need of intervention. Which we think, will reduce the burden of problem.

**Incentives:** You will not be provided any incentive for your participation in the study. However, we will gratefully acknowledge your participation.

**Confidentiality:** The information that we collect in this study will be kept confidential. The questionnaire is confidential and will not be connected to your name or other identifying information. When using the information for research purpose, it will only be identified by code number. It will be kept under lock and will not be divulged to anyone except the investigators.

**Right to refuse or withdraw:** You do not have to take part in this research if you do not wish to do so, and refusing to participate will not affect your future treatment at the health facility or elsewhere in any way. You may stop participating in the interview at any time that you wish without losing any of your rights as a participant.

Therefore to participate in this studies you:

1. Agree
2. Disagree

## 1. English Version

Section 1: Socio-demographic part

**Questionnaire to assess level of women satisfaction towards maternity home services**

**Scale for satisfaction with MWH services**

s.no	Identification	
01	District name	
02	Kebele name	
03	Setting	1. Urban                      2. Rural
<b>section1: Socio-demographic characteristics</b>		
s.no	<b>Question</b>	<b>Responses</b>
04	Age	_____ yrs
05	Education status	1. Can' read and write 2. Read and write but no formal education 3. _____[Highest grade completed if attended school]
06	Spouse educational status, if alive	1. Can' read and write 2. Read and write but no formal education 3. _____[Highest grade completed if attended school]
07	Marital status	1. Married 2. Divorced 3. Widowed
08	Occupational status	1. Farmer 2. Governmental employee 3. Merchant 4. House wife 5. Other [specify]_____
09	Religion	1. Islam 2. Orthodox 3. Protestant 4. Other[specify]_____
010	Ethnicity	1. Oromo 2. Amhara 3. Dawuro 4. kaffaa 5. Others[specify]_____
011	Average monthly family income(Birr)	_____

<b>Section 2: Obstetric and MWH history</b>		
012	Parity ( number including this baby)	
013	Have you ever used MWH apart for this	1. Yes      2. No
014	Apart from this recent birth [the one you gave birth in MWH], have you given birth before?	1. Yes      2. No
015	If 'yes' where did you give birth?	1. home 2.health institution
016	Who accompanied you to the MWH?	1. Husband 2. family/friend 3.neighbour 4. HDA 5 .other specify _____
017	Have you ever diagnosed with complication related to delivery or pregnancy?	1. Yes      2.No
018	How long did you stay in MWH before birth	_____ days
019	How did you reach MWH?	1. On foot 2 .Vehicle (paid) 3. Vehicle (free)
020	How long does it take to reach this facility from your home?	1. More than 2hrs 2. 1hr to 2hrs 3. 30 mins to 1hr 4. Less than 30mins
021	Is your area accessible for ambulance	1.Yes      2.No
022	How many you were in one prenatal room?	_____
023	How many you were in one postnatal room?	_____
024	Will you like to use MHW again?	1. Yes      2. No
025	Would you recommend this MWH to others (family, friend,)?	1. Yes      2. No





<b>Section 3:</b>	<b>MWH Satisfaction dimensions</b>	<b>Agreement score 1=Not satisfied (SN=any extent), 2=Not sure (somewhere between), 3=Satisfied (s=any extent)</b>		
<b>D1</b>	<b>Satisfaction with standard of the MWH facility</b>	<b>1</b>	<b>2</b>	<b>3</b>
1.	I was -----how the house for MWH is constructed (roof, window, door etc)			
2.	I was-----with the air flow of the house i.e. it was not suffocated			
3.	I was----- with MWH in that it let someone (at least one) of my household member to be with me during my stay in MWH			
4.	I was -----with presence of other PWs in the same room of MWH with me before my delivery			
5.	I was -----with presence of other mothers in the same room of MWH with me after I gave birth			
6.	I was -----with cultural (e.g. praying) or environmental features of the MWH			
7.	I was ----with access to water during my stay in the MWH			
8.	I was ----with toilet facility during my stay in the MWH			
9.	I was ----with bathing facilities during my stay in MWH			
10.	I was ----with the light condition during my stay in MWH			
11.	I was ----with cooking condition during my stay in MWH			
12.	I was----with overall standard of the MWH			
<b>D2</b>	<b>Satisfaction with (Utensils in MWH)</b>			
13.	I was -----with sleeping arrangements (Bed, mattress, pillow, bed sheets and blankets) I was using during my stay in MWH			
14.	I was----with water containers and bottles I was using during my stay in MWH			
15.	I was ----with chairs I was using during my stay in MWH			
16.	I was -----health teaching posters I was seeing during my stay in MWH			
17.	I was ----with bed net I was using during my stay in MWH			
18.	I was ----with eating/drinking utensils I was using during my stay in MWH			
19.	I was----with pots/cups for tea/coffee/water during my stay in MWH			
20.	I was----with overall utensils inside MWH during my stay there			
<b>D3</b>	<b>Satisfaction with services (ambulance, health, meal, recreational) provided in MWH</b>			
<b>D3.1</b>	<b>Ambulance service</b>			
21.	I was ----with ambulance service whenever I needed anytime during labor/prenatal/post-delivery as long as I was in MWH			

<b>D3.2</b>	<b>Prenatal service related items</b>			
22.	I was---with the quality/range of prenatal checkup services I had when I was in MWH			
23.	I was ----with frequency of prenatal checkup services I had when I was in MWH			
24.	I was ----with checkup and examinations I received during my stay in MWH.			
25.	I was ----with closeness of prenatal follow-up during my stay in MWH			
26.	I was ----with supplementations e.g. iron folate I was receiving during my stay in MWH			
27.	I was ----with solutions I got to problems and complaints (meal, family, services etc.)I had during my stay in MWH			
28.	I was ----with content of health education/advice I received how to keep my pregnancy and fetal health during my stay in MWH.			
29.	I was ----with referral services given to me when I stayed in MWH			
30.	I was ----with medical services rendered to me during my stay in prenatal room of MWH			
31.	Generally I was-----with overall prenatal services rendered to me during my stay in MWH.			
<b>D3.3</b>	<b>Postnatal service related items</b>			
32.	I was ----with quality/range of postnatal service rendered to keep me healthy within 24hrs after delivery during my stay in MWH			
33.	I was ---with frequency of postnatal service rendered to me during my stay in MWH			
34.	I was---with assistance I received from health workers about right way of feeding breast to my baby			
35.	I was ---with closeness of follow-up service rendered to me and my baby to identify and manage danger signs/ problem when I was in MWH			
36.	I was---with the vaccination service given to my baby when I was in MWH			
37.	I was ----with content of health education/advice I received on how to keep myself and baby healthy during my stay in MWH after I gave birth			
38.	I was---with overall services rendered to my baby and me during my stay in MWH after I gave birth			
<b>D3.4</b>	<b>Meal service related items</b>			
39.	I was ----with meal services rendered to me or my caregiver as long as I was in MWH			
40.	I was----with quality/diversity of food service I and/ or my caregiver received during my stay in MWH			
41.	I was -----sufficiency (frequency) of the food service I and/or my caregiver received every day during my stay in MWH			
42.	I was ---with the adequacy in size/amount of food service provided to me and/or my caregiver when I was in MWH			
43.	I was---with how I and/or my caregiver were treated when we received food services when I was in MWH			
44.	I was---with hygiene of the food services I and/or my caregiver received during my stay in MWH			
45.	I was----with the inspection/supervision during preparation of the foods I was served with when I was in MWH			

46.	I was---with overall food service we were getting when I was in MWH			
<b>D3.5</b>	<b>Sanitation service related items</b>			
47.	I was---with every day sanitation condition of waiting house in the MWH during my stay there			
48.	I was ---with everyday sanitation condition of toilets during stay in MWH			
49.	I was---with everyday sanitation condition of bathroom when I was in MWH			
50.	I was---with everyday supervision for sanitation of waiting house/toilet/bathroom of MWH when I was there			
51.	I was---with everyday overall sanitation services when I was in MWH			
<b>D3.6</b>	<b>Recreational service related items</b>			
52.	I was ---with Television/radio service we were watching/listening when I was in MWH			
53.	I was---with arrangements for coffee ceremony we were experiencing when I was in MWH			
54.	I was ----with porridge preparation session we had altogether when I was in MWH			
55.	I was ----with funny child meal preparation practices when I was in MWH			
56.	I was ----with opportunity to cook our own meal altogether when I was in MWH			
57.	I was ---with relationship, talk and stay we had among each other being MWH users			
58.	I was ----with overall recreational services/programs/amentias that existed in MWH when I was there			
<b>D4</b>	<b>Satisfaction with IPC and social supports</b>			
59.	I was....with my husband's information/advice about MWH			
60.	I was....with my husband's assistance to use MWH			
61.	I was....with my husband's visiting me at MWH			
62.	I was....with my husband's emotional support while I am at MWH			
63.	I was....with my husband's financial support while I am at MWH			
64.	I was....with my husband's understanding of my concerns/worries while I am at MWH			
65.	I was....with my husband's care of the rest of families while I am at MWH			
66.	I was...with my husband's reception up on my discharge from MWH			
67.	Generally; I was...with overall supports my husband has given me during my MWH use			
<b>D4.1</b>	<b>Would rate the extent of your satisfaction with your families/relatives supports you received while you are at MWH; if any?</b>			
68.	I was....with family/relatives information/advice about MWH			
69.	I was....with family/relatives assistance to use MWH			
70.	I was....with family/relatives emotional support to help me use MWH			
71.	I was....with family/relatives visits while I am at MWH			
72.	I was....with family/relatives emotional supports while I am at MWH			

73.	I was....with my family/relatives concerns/interest in me and my baby at MWH			
74.	I was....with my family/relatives understanding of my worries while I am at MWH			
75.	I was....with my family/relatives care of the rest of families while I am at MWH			
76.	I was....with my family/relatives reception up on my discharge from MWH			
77.	I was....with my family/relatives visit me at home after my return from MWH			
78.	Generally; I was...with overall supports my relatives/families have given me during my MWH use			
<b>D4.2</b>	<b>Would rate the extent of your satisfaction with your neighbors or 1 to 5 networks supports you received while you are at MWH; if any?</b>			
79.	I was....with 1 to 5 networks information/advice about MWH			
80.	I was....with 1 to 5 networks assistance to use MWH			
81.	I was....with 1 to 5 networks emotional supports while I am at MWH			
82.	I was....with 1 to 5 networks visits me at MWH			
83.	I was....with 1 to 5 networks concerns/interest in me and my baby at MWH			
84.	I was....with 1 to 5 networks understanding of my worries while I am at MWH			
85.	I was....with 1 to 5 networks care of the rest of families while I am at MWH			
86.	I was....with 1 to 5 networks reception up on my discharge from MWH			
87.	I was....with 1 to 5 networks visit me at home after my return from MWH			
88.	Generally; I was...with overall supports my 1 to 5 networks have given me during my MWH use			
<b>D4.3</b>	<b>Would you rate the extent of satisfaction with supports from HEWs you received while you are at MWH?</b>			
89.	I was....with the HEWs information/advice about MWH			
90.	I was....with the HEWs assistance to link me to MWH			
91.	I was....with HEWs emotional advice to help me use MWH			
92.	I was....with HEWs engagement to aid me with MWH			
93.	I was....with HEWs reception up on my discharge from MWH			
94.	I was....with HEWs visit me at home after my return from MWH			
95.	Generally; I was...with overall supports HEWs have given me during my MWH use			
<b>D4.4</b>	<b>Would you rate the extent of satisfaction with supports you received from HCWs while you are at MWH?</b>			
96.	I was....with the reception it got from HCWs when I arrived at the MWH			
97.	I was....with the language employed by HCWs to communicate with me			
98.	I was....with how HCWs in MWH explained me things in a way I could understand			
99.	I was....with how HCWs in MWH explained to me about medical procedures during my stay in MWH			
100.	I was....with how HCWs in MWH gave me enough information about what things are going with my pregnancy			

	while I was in MWH			
101.	I was.....with how HCWs employed different methods (used IEC materials) to teach/counsel me			
102.	I was.....with the health education/information given to me			
103.	I was.....with impartiality of HCWs in MWH			
104.	I was.....with the friendly and courteous relation I had with HCWs in MWH			
105.	I was...with the appearance of HCWs in MWH			
106.	I was.....with how HCWs in MWH made me feel free to discuss all my concerns to them			
107.	I was.....with how HCWs in MWH were sensitive to my worries			
108.	I was.....with how HCWs in MWH ensured privacy during treatment and examinations			
109.	I was.....with how HCWs in MWH ensured confidentiality			
110.	I was.....with honesty and trustfulness of HCWs in MWH			
111.	I was.....with how HCWs in MWH received my visitors			
112.	I was...with how polite and careful HCWs in MWH were; while giving treatment/examination			
113.	I was.....with how HCWs in MWH usually spend plenty of time with me.			
114.	I was.....with how HCWs feels about me while I am in labor			
115.	I was.....with how HCWs console/comfort/reassure me while I am in labor			
116.	I was.....with how HCWs expressed/demonstrate sense of support			
117.	Generally, I was...with overall HCWs support I got during my stay in MWH.			
<b>D4.5</b>	<b>Would rate the extent of your satisfaction with interaction/supports you received from servant/cleaners while you are at MWH; if any?</b>			
118.	I was ...with the interpersonal relation I had with other women at MWH			
119.	I was...with the interpersonal relation I had with servant at MWH			
120.	I was...with how servant at MWH listens to my words			
121.	I was...with how servant at MWH understands my problems			
122.	I was...with how servant at MWH reacts to my concerns			
123.	I was...with how servant at MWH expressed support			
124.	I was...with the interpersonal relation I had with cleaners at MWH			
125.	Generally; how do rate your overall satisfaction with interaction/support of servant at MWH?			



## 2. Afan Oromo version

### 1.1. Unka gaaffiiif deebii itti quufiinsa haadholeen mana ITH irratti qaban sakatta'uuf qophaa'e

Lakk.		
01	Maqaa Aanaa	
02	Maqaa gandaa	
03	Haala bakkichaa	1. Magaalaa 2. baadiyyaa
<b>Kutaa 1: socio-demographic</b>		
	<b>Gaaffilee</b>	<b>Deebii</b>
04	Umrii	Waggaa _____ -
05	Sadarkaa barnootaa	1. Dubbisuuf barressu kan hin dandeenye 2. Dubbisuuf barreessu ni dandeessi 3. Barnoota sadarkaa ol-aanaa xumurteettii
06	Sadarkaa barnootaa abbaa manaa, yoo jiraate	1. Dubbisuuf barressu kan hin dandeenye 2. Dubbisuuf barreessu ni danda'a 3. Barnoota sadarkaa ol-aanaa xumureera
07	Haala gaa' elaa	1. Herumtee kan waliin jiran 2. Adda bahan /wal-hiikan 3. Ni du'e /abbaan manaa kan irraa du'e.
08	Haala hojii	1. Qonnaan bultuu 2. Hojjettuu mootummaa 3. Daldaltuu 4. Mana keessa kan hojjeettu (house wife) 5. Others (specify.....)
9	Amantii	1. Musuliima 2. Ortodoxii 3. Protestaantii 4. Others (specify.....)
10	Qomoo	1. Oromoo 2. Amhara 3. Dawroo 4. Kaffaa 4. Others (specify.....)
11	Ji'attii galii giddu-galeessaa	Qarshii _____
<b>Kutaa 2: seenaa haadholee mana ITH fi da'umsa waliin wal-qabatee jiru</b>		
12	Bayyina daa'imaa deessee kan ammaa dabalatee	
13	Isa ammaa kana malee mana ITH fayyadamtee beektaa?	1. Eeyye 2. lakki
14	Isa ammaa kana malee kanaan dura deessee beektaa?	1. Eeyye 2. lakkii
15	Yoo 'eeyyee' ta'e eessatti deessee?	_____





**Kutaa 3: kallattilee itti quufiinsaa**

<b>D1</b>	<b>Kallattiilee itti quufiinsa tajaajila iddoo turtii haadholee</b>	<b>Safartuu waliigaltee 1=itti hin gammanne/hin quufne(kallattii kamiinuu),2=hin beekamne(giddu-gidduu),3=itti gammadeera/quufeera(kallattii kamiinuu),</b>		
<b>D.1</b>	<b>Itti quufiinsa standardii mana iddoo turtii haadholee irratti</b>	<b>1</b>	<b>2</b>	<b>3</b>
1.	Haala ijaarsa mana ITH (lafasaa,foddaa, balbala,.....) Ilaalchisee an _____			
2.	Qilleensa galchuu isaa ilaalchisee an _____;- jechuun ukkaamamaa miti.			
3.	Haala ballina kutaa ITH ilaalchisee,ana dabalatee yoo xiqqaate nama tokko maatiikoo keessaa fudhachuu danda'ussaarratti an _____			
4.	Osoon hin da'in dura kutaa ITH tokko keessa hadhi ulfaa kan biraan na wajjin turuushee illaalchisee an _____			
5.	Eddan dahee boodas kutaa ITH tokko keessa hadhi ulfaa kan biraan na wajjin turuushee illaalchisee an _____			
6.	Manni ITH haala Aadaa naanno giddu-galeessa godhachuusaa ilaalchisee an _____			
7.	Yeroo turtiikoo mana ITH kessaatii bishaan haala salphaa ta'een argachuu ilaalchisee an _____ -			
8.	Yeroo turtii koo mana ITH keessatti tajaajila mana boolii ilaalchisee an _____			
9.	Yeroo turtii koo mana ITH keessatti tajaajila mana qaama dhiqannaa ilaalchisee an _____			
10.	Yeroo turtii koo mana ITH keessatti tajaajila ibsaa ilaalchisee an _____			
11.	Yeroo turtii koo mana ITH keessatti tajaajila mana nyaata itti bilcheessan ilaalchisee an _____			
12.	Haala waliigala standardii mana ith ilaalchisee an _____			
<b>D.2</b>	<b>Itti quufiinsa meeshaalee ilaalchisee(meeshaalee mana ith keessaa)</b>			
13.	Haala ciisichaa mana ITH(siree,firaashii ,borattii,hansoolaa,bullukkoo)'n yeroo turtiikoo fayyadamaa ture ilaalchisee an _____			
14.	Qodaa bishaan itti buusan ;jaarkaanii,hilandii fi jookii,yeroo turtiikoo ITH keessaa itti fayyadamaa ture ilaalchisee an _____			
15.	Teessoo garaa garaa kan akka barcumaa yeroo turtiikoo mana ITH an itti fayyadamaa ture ilaalchisee an _____			
16.	Fakkilee dhimma fayyaa barsiisan mana ITH keessaa jiran yeroo turtiikoo kanan ilaalaa ture ilaalchisee an _____			
17.	Itti fayyadama Agoobaraa yeroo turtiikoo mana ITH keessaa ilaalchisee an _____			
18.	Meshaalee itti nyaataniif dhugan yeroo turtiikoo mana ITH keessaa itti fayyadamaa ture ilaalchisee an _____			
19.	Meshaalee akka jabanaa,shiinii,burcuqqoo ,buna ,shayii an yeroo turtiikoo mana ITH itti fayyadamaa ture ilaalchisee an _____			
20.	Walumaagalatti,Yeroo turtii koo ITH keessatti meeshaalee mana ITH keessaa ilaalchisee an _____			

<b>D3</b>	<b>Itti quufiinsa tajaajiloota(ambulaansii,nyaataa,yaalaa,qulqullinaa,bashannanaa)</b>			
D3.1	<b>Tajaajilaa ambulaansii</b>			
21.	Tajaajila ambulaansii yeroo barbaadetti yeroo da'umsa duraa,da'umsaa ,da'umsa boodaa hamman ITH keessa jirutti fayyadamuu illachisee an _____			
<b>D3.2</b>	<b>Tajaajila da'umsa duraa</b>			
22.	Qulqullina tajaajila qorannoo dahumsa duraa yeroon mana ITH keessa ture argadhe ilaalchisee an _____ -			
23.	Marsaalee(si'a meeqa)qorannoo tajaajila dahumsa duraa yeroon mana ITH keessa ture argadhe ilaalchisee an _____			
24.	Tajaajila qorannoo fi sakatta'iinsaa yeroon mana ITH keessa ture naaf godhame ilaalchisee an _____			
25.	Dhiheenya hordoffii tajaajila dahumsa duraa yeroon mana ITH keessa ture argachaa ture ilaalchisee an _____			
26.	Tajaajila raabsa qorichalee, fkn. Iron folate yeroon dahumsa dura mana ITH keessa ture argachaa ture ilaalchisee an _____			
27.	Yeroon dahumsa dura mana ITH keessa turetti furmaata rakkoolee fi yaaddookoo kanneen akka,nyaataa,maatii,tajaajila irratti argadhe ilaalchisee an _____			
28.	Qabiyyee barumsa fayyaa ulfakootiif akkamitti eguumsa akkan godhuufi fayyaa mucaa koollee akkamitti eguu akkan qabu yeroo turtiikoo dahumsa duraa mana ITH irratti an _____			
29.	Tajaajila ol-ergiinsaa yeroon dahumsa dura mana ITH keessa ture argadhe ilaalchisee an _____			
30.	Tajaajila yaala dhibee yeroon kutaa dahumsa duraa mana ITH keessa ture naaf kenname ilaalchisee an _____			
31.	Tajaajila waliigalaaa osoon hin daahin dura mana ITH keessa turetti naaaf kenname ilaalchisee an _____			
<b>D3.3</b>	<b>Tajaajila da'umsa boodaa</b>			
32.	Sa'atilee 24'n jalqaba da'umsa boodaa keessaatti qulqullina tajaajila da'umsa boodaa fayyaakoo eeguuf yeroo turtiikoo mana ITH keessaa naaf kenname ilaalchisee an _____ -			
33.	Da'umsa booda yeroo turtiikoo mana ITH keessaatti ogeessonna fayyaa yeroo yeroon na ilaaluu isaani ilaalchisee an _____			
34.	Gargaarsa ogeessota fayyaa irraa haala akkamiitiin harma daa'ima koo hoosisuu akkan qabu irratti argadhe ilaalchisee an _____			
35.	Mallattolee dhibeewwan hamoo adda baasuuf to'achuuf hordoffii dhiheenyaan ogeessota fayyan anaafi mucaa kootiif godhame ilaalchisee an _____			
36.	Yeroon mana ITH keessa turetti tajaajila talaalli daa'ima koof kenname ilaalchisee an _____			
37.	Qabiyyee barumsa fayyaa wa'ee fayyaa koof daa'ima koo eeguu ilaalchisee da'umsa booda yeroon mana ITH keessa ture naaf kenname irraatti an _____			
38.	Da'umsa booda yeroon mana ITH keessa ture tajaajila waliigalaa naaf kenname ilaalchisee an _____			
<b>D3.4</b>	<b>Tajaajila nyaataan wal-qabatee</b>			

39.	Hangan mana ITH keessa jirutti tajaajila nyaataa anaaf ykn nama na waliin jiruuf kenname ilaalchisee an _____			
40.	Tajaajila nyaataa qulqullina qabu ykn gosa nyaata garaa garaa yeroo turtookoo mana ITH keessaa anaaf nama na waliin jiruuf godhamaa ture ilaalchisee an _____			
41.	Tajaajila nyaataa quubsaa( guyyaatti si'a meeqa,ciree,laaqana,eeggachisaa,irbaata.. ) yeroo trurtii koo mana ITH keessatti anaafi nama na waliin jiruuf koof kenname ilaalchisee an _____			
42.	Tajaajila nyaataa ga'a (ballinaan /bayyinaan ) ta'e yeroo turtiikoo mana ITH keessattii anaa fi nama na waliin jiruuf kanname ilaalchisee an _____			
43.	Yeroon mana ITH keessa turetti tajaajila nyaataa yeroo argannu akkataa itti tajaajilamaa turre ilaalchisee an _____			
44.	Yeroo mana ITH keessa turetti nyaata qulqullinni isaa eegamee qophaa'e argachuukoo ilaalchisee an _____			
45.	Yeroon mana ITH keessa turetti hordoffii fi sakatta'iinsa haala qophii nyaataa irratti godhamu ilaalchisee an _____			
46.	Walumaagalatti tajaajila nyaataa yeroo turtiikoo mana ITH keessaa argachaa ture ilaalchisee an _____			
<b>D3.5</b>	<b>Tajaajila qulqullinaa ilaalchisee</b>			
47.	Yeroo turtii kootti tajaajila qulqullinaa guyyaa guyyaan mana ITH tiif godhamu ilaalchisee an _____			
48.	Yeroo turtiikoo mana ITHtti tajaajila qulqullinaa guyyaa guyyaan mana boolii tiif godhamu ilaalchisee an _____			
49.	Yeroo turtiikoo mana ITHtti tajaajila qulqullinaa guyyaa guyyaan mana qaama dhiqannaa tiif godhamu ilaalchisee an _____			
50.	Yeroon mana ITH keessa turetti hordoffii guyyaa guyyaatti tajaajila qulqullina mana ith,mana boolii fi mana qaama dhiqannaa irratti godhamu ilaalchisee an _____			
51.	Yeroo mana ITH keessa turetti tajaajila qulqullinaa waliigalaa guyyaa guyyaan godhamu ilaalchisee an _____			
<b>D3.6</b>	<b>Tajaajila bashannanaa ilaalchisee</b>			
52.	Yeroo mana ITH keessa turetti tajaajila radio,televizsinii dhaggeeffataa ture ilaalchisee an _____			
53.	Yeroo mana ITH keessa turetti sagantaa qophii buna geggeessaa turre ilaalchisee an _____			
54.	Yeroo mana ITH keessa turetti qophii marqaa qopheessu walii wajjin qabaataa turre ilaalchisee an _____			
55.	Yeroo mana ITH keessa turetti sagantaa nyaata daa'imaa qopheessuu ilaalchisee an _____			
56.	Yeroo mana ITH keessa turetti carraaa nyaata keenya waliin taanee qopheessu ilaalchisee an _____			
57.	Yeroo mana ITH keessa turetti hriiroo,haasaa garaagaraa fi turtii waliin qabaachaa turre ilaalchisee an _____			
58.	Yeroo mana ITH keessa turetti walumaagalatti tajaajila bashannanaa/qophiilee argachaa ture ilaalchisee an _____			

<b>D4</b>	<b>Tajaajila hariiroo, dubbii wali-waliinii fi gargaarsa hawaasaa</b>			
59.	Gorsa /odeeffanoo abbaan warraakoo waa'ee mana ITH naaf kenne ilaalchisaa an _____			
60.	Gargaarsa abbaan manaa koo akkan mana ITH fayyadamuuf naaf godhe ilaalchisee an _____			
61.	Daawwannaa abbaan warraakoo yeroon mana ITH keessa ture naaf godhe ilaalchisee an _____			
62.	Yeroon mana ITH keessa turetti gargaarsa miiraa/xiinsammuu abbaan warraa koo naaf godhe ilaalchisee an _____			
63.	Yeroon mana ITH keessa turetti gargaarsa qarshii abbaan warraakoo naaf godhe ilaalchisee an _____			
64.	Yeroon mana ITH keessa turetti abbaan warraakoo soda/rakkoo koo na hubachuu isaa ilaalchisee an _____			
65.	Yeroon mana ITH keessa turetti kunuunsa abbaan warrakoo maatii/ijoollee manatti hafaniif godhaa ture ilaalchisee an _____			
66.	Yeroon mana ITH keessa bahe manatti galu simannaa abbaan warraakoo naaf godhe ilaalchisee an _____			
67.	Walumaagalatti,gargaarsa abbaan warraakoo yeroon mana ITH turetti naaf godhe ilaalchisee an _____			
<b>D4.1</b>	<b>Gargaarsa maatii ykn firootaa ilaalchisee</b>			
68.	Gorsa /odeeffannoo maatiin/ firri waa'ee mana ITH naaf kennan ilaalchisee an _____			
69.	Gargaarsa maatiin/firrii akkan mana ITH fayyadamu naaf godhan ilaalchisee an _____			
70.	Gargaarsa xiinsammuu/miiraa maaatiin/firrikoo akkan mana ITH fayyadamuuf naaf godhan ilaalchisee an _____			
71.	Daawwannaa maatii/firrikoo yeroon mana ITH keessa ture naaf godhan ilaalchisee an _____			
72.	Gargaarsa xiinsammuu/miiraa maaatiin/firrikoo yeroon mana mana ITH keessa ture naaf godhan ilaalchisee an _____			
73.	Yeroon mana ITH keessa ture maatiin/firoonni koo anaaf mucaakoof dhimmamuu isaanii ilaalchisee an _____			
74.	Yeroon mana ITH keessa turetti maatii/firriikoo soda/yaaddoon kootiif bakka kennuu/isaaniif galuu ilaalchisee an _____			
75.	Yeroon mana ITH keessa turetti kunuunsa maatiin/firrikoo maatiikoo manatti hafaniif godhaa turan ilaalchisee an _____			
76.	Yeroon mana ITH keessa bahe mana galu simannaa maatiin/firrikoo naaf godhan ilaalchisee an _____			
77.	Daawwanna eddan mana galee booda maatiin/firrikoo manatti naaf godhan ilaalchisee an _____			
78.	Walumaagalatti,gargaarsa waliigalaa maatiin/firrikoo yeroon mana ITH turetti naaf godhe ilaalchisee an _____			
<b>D4.2</b>	<b>Gargaarsa olla ykn 1-5 ilaalchisee</b>			
79.	Gorsa /odeeffannoo tokko shaneen waa'ee mana ITH naaf kennan ilaalchisee an _____			
80.	Gargaarsa tokko shaneen akkan mana ITH fayyadamu naaf godhan ilaalchisee an _____			
81.	Gargaarsa xiinsammuu/miiraa tokko shaneen yeroon mana ITH keessa ture naaf godhan ilaalchisee an _____			
82.	Daawwannaa tokko shaneen yeroon mana ITH keessa ture naaf godhan ilaalchisee an _____			

83.	Yeroon mana ITH keessa turetti tokko shaneen anaa mucaakoof dhimmamuu isaanii ilaalchisee an ____			
84.	Yeroon mana ITH keessa turetti tokko shaneen soda/yaaddoo kootiif bakka kennuu/isaaniif galuu ilaalchisee an ____			
85.	Yeroon mana ITH keessa turetti kunuunsa tokko shaneen maatiikoo manatti hafaniif godhaa turan ilaalchisee an ____			
86.	Yeroon mana ITH keessa bahe manatti galu simannaa tokko shaneen naaf godhan ilaalchisee an ____			
87.	Daawwana eddan mana galee booda tokko shaneen manatti naaf godhan ilaalchisee an _____			
88.	Walumaagalatti,gargaarsa waliigalaa tokko shaneen yeroon mana ITH turetti naaf godhe ilaalchisee an _____			
<b>D4.3</b>	<b>Itti quufiinsa HEF ilaalchisee</b>			
89.	Gorsa /odeeffannoo hef waa'ee mana ITH naaf kennite ilaalchisee an _____			
90.	Gargaarsa HEF akkan gara mana ITH dhufuuf naaf godhan ilaalchisee an _____			
91.	Gargaarsa xiinsammuu/miiraa hefakkan mana ITH fayyadamuuf naaf godhan ilaalchisee an _____			
92.	Gargaarsa yeroon mana ITH keessa ture naaf godhamaa ture keessatti hirmaannaa HEF ilaalchisee an _____			
93.	Yeroon mana ITH keessa bahe manatti galu simannaa HEF naaf godhan ilaalchisee an _____			
94.	Daawwana eddan mana galee booda manatti HEF naaf godhan ilaalchisee an _____			
95.	Walumaagalatti,gargaarsa waliigalaa HEF yeroon mana ith turetti naaf godhe ilaalchisee an _____			
<b>D4.4</b>	<b>Gargaarsa ogeessota fayyaa ilaalchisee</b>			
96.	Yeroon mana ITH ga'etti simannaa ogeessonna fayyaa naaf godhan ilaalchisee an _____			
97.	Afaan/qooqa ogeessonna fayyaa fayadamuun natti dubbatan ilaalchisee an _____			
98.	Akkaataa ogeessonna fayyaa wantota/dhimma koo haalan hubachuu danda'uun naaf ibsan ilaalchisee an _____			
99. 1	Akkaataa ogeessonna fayyaa yeroo turtiikoo mana ITH keessaa ibsa waa'ee gargaarsa fayyaa naaf barbaachisanii naaf laatan ilaalchisee an _____			
100.	Yeroo turtiikoo mana ITH keessaa odeeffannoo waa'ee mucaa garraa keessaa/ haala ulfikoo irra jiruu ogeessonna fayyaa naaf kennan ilaalchisee an _____ -			
101.	Haala ogeessonna fayyaa maloota garaa garaa fayyadamuudhaan (eg. IEC material ) barsiisan ilaalchisee an ____			
102.	Barumsa /odeeffannoo fayyaa yeroon mana ITH keessa ture argadhe ilaalchisee an _____			
103.	Hala wal-qixxummatin nama hunda ija tokkoon ilaaluu ogeessota fayyaa mana ITH keessaa ilaalchisee an _____			
104.	Hariiroo hiriyyummaa an ogeessota fayyaa mana ITH waliin an qaabbadhee ilaalchisee an _____			
105.	Ogeessonna fayyaa mana ITH keessatti argamuu isaanii ilaalchisee an _____ -			

106.	Yeroon mana ITH keessa turettaa akkataa of dhimmakoo/sodaakoo sodaa tookko malee akkan isaanii wajjin mari'adhuuf gochaa turan ilaalchisee an _____ -			
107.	Soda/yaaddoo kootiif dhimmamuu/bakka kennuu of ilaalchisee an _____			
108.	OF mana ITH keessaa akkaataa isaan yeroo qorannoo fi yaalaa dhoksa haadholee itti eegan ilaalchisee an _____			
109.	OF mana ITH keessaa akkaataa isaan iccitii itti eegan ilaalchisee an _____			
110.	Iftoominaa fi amanamummaa ogeessota fayyaa mana ITH keessa hojjetan ilaalchisee an _____			
111.	Akkaataa OF namoota na daawataniif simanna isaan godhan ilaalchisee an _____			
112.	OF yeroo yaala fayyaa/ qorannoo fayyaa godhan haala gaariif obboluummaatiin ykn qalbii guutuun ykn haala ofirraa baasa hin taaaneen kennuu isaanii ilaalchisee an _____			
113.	OF yeroo naaf qabaatanii na wajjiin turuu isaanii ilaalchisee an _____			
114.	Yeroon da'umsa irra jiru waa'een koo isaanitti(OF) dhagahamuu isaa ilaalchisee an _____ -			
115.	Yeroon da'umsa irra jiru jajjabina ykn haamilee OF naaf kennaa turan ilaalchisee an _____ -			
116.	Yeroon da'umsa irra jiru gargaarsa OF naaf keennaa turan ilaalchisee an _____ -			
117.	Walumaagalattii gargaarsa OF yeroon mana ITH kessa ture argachaa ture ilaalchisee an _____			
<b>D 4.5</b>	<b>Gargaartuu ykn qulqulleessituu wajjin wal-qabatee</b>			
118.	Hariiroon haadholee kanneen biroo mana ITH keessaa wajjin qabaachaa ture ilaalchisee an _____			
119.	Hariiroo an gargaartuu mana ITH keessaa wajjin qabaachaa ture ilaalchisee an _____ -			
120.	Gargartuu/hojjetuun mana ITH keessaa waanan itti himadhuu dhaggeeffachuu ishee ilaalchisee an _____			
121.	Gargartuu/hojjetuun mana ITH keessa rakkoo koo hubachuu ishee ilaalchisee an _____ -			
122.	Gargartuu/hojjetuun mana ITH keessa rakkoo kootiif quuqamuu ishee ilaalchisee an _____			
123.	Gargartuu/hojjetuun mana ITH keessa rakkoo kootiif gargaarsa naa barbaaadduu ishee ilaalchisee an _____			
124.	Hariiroon qulqulleessituu mana ITH keessaa hojjetu waliin qabaachaa ture ilaalchisee an _____			
125.	Walumaaa galattii hariiroo/gargaarsa gargaartuu mana ITH tti haagam tokko itti gammaddeetta/quufteetta?			

