Implementation of Rural Health Extension Services in Lalo Kile Woreda, Qelem Wolega Zone, Oromia Regional State, West Ethiopia

By

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Abstract

Background: Since 2004, Ethiopia has been deploying specially trained new cadres of community based health workers in rural areas of the country known as health extension Workers. The modalities for HSEP implementation include an outreach programme run by female health extension workers (HEWs), two per kebele serving 5000 people.

Objective: The objective of the study was to assess Implementation of health extension services in Lalo Kile woreda, Qelem Wollega, Oromia regional state, West Ethiopia.

Methods: Community based cross sectional study was conducted using both quantitative and qualitative data collection method from October14 to November14, 2013. Quantitative data was collected using a pre-tested structured interviewer administered questionnaire by eight female data collectors from a sample size of 422 households calculated with single population proportion formula and selected by simple random method from household register found in each kebele. All health posts were assessed using observation checklist. For qualitative data focus group discussion and in-depth interview were conducted with Health extension workers and Health developmemt army leaders. The quantitative data was analyzed using Statistical Package for Social Science version 16.0 while qualitative data was analyzed thematically. Oral informed consent was obtained from all participants.

Results: Of the 409 interviewed households, 75% of them had at least one service related contact with Health Extension Workers in the previous six month. The mean frequency of service related contact with Health Extension workers was found to be 2.9(±0.9). The mean frequency of home visit a household received was 0.9(±1.02). The mean scores for individual attitude items range from 3.4(±0.75) to 4.2(±0.59) while the mean score for the overall attitude scale was being 3.9 (±0.46*).* Qualitative study identified that Individual competencies of HEWs, availability of supply and logistic system as well as the level of support from kebele leaders were reported to influence the program implementation and utilization.

Conclusion: Health development army was found the most essential structure on maternal heath related issues and the study showed that attitude on contribution of the program for the community has shown significant association on affecting program implementation.

Recommendation: supportive supervision and intersectorial collaboration with sectors in the kebele should be promoted to built positive attitude towards the implementation of the program.

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Acronyms and Abbreviations

CBRHA	Community Based Reproductive Health Agents
CDD	Community Drug Distributors
CDTI	Community Directed Treatment with Ivermectine
CHW	Community Health Workers
EDHS	Ethiopian Demographic and Health Survey
ETB	Ethiopian Birr
FGDs	Focus Group Discussion
FMOH	Federal Ministry of Health
HES	Health Extension service
HEP	Health Extension program
HEWs	Health Extension Workers
HSEP	Health service Extension Program
HSDP	Health Sector Development Programme
ITN	Insecticide-Treated Bed Nets
KHC	kebele health committee
LLNs	Long Lasting Nets
MDGs	Millennium Development Goals
PHC	Primary Health Care
PHCU	Primary Health Care Unit
SSA	Sub Saharan Africa
USD	United States of America Dollar
VCHW	Voluntary Community Health Workers
WHO	World Health Organization

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Chapter 1: Introduction

1.1. Background

The International Conference on Primary Health Care, meeting in Alma-Ata on September 1978, expressing the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all the people of the world, this conference was a milestone agreement that created international call for Primary Health Care (1). The conference called for a comprehensive approach whereby primary health care could be seen as the key to achieving an acceptable level of health throughout the world (1, 2). Primary Health Care according to the Alma-Ata concusses is "essential health care based on practical, scientifically sound, and socially acceptable methods and technologies made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford"(2,3). Even though several programmes those manifest that the PHC principles were initiated before the Alma-Ata Declaration; the declaration created a conducive environment for many of the initiatives on PHC. Many National health systems, based on PHC undertook a major reform in health services in order to achieve their aims (3,4,5).Since 1980's Ethiopia had endorsed PHC strategy to realize equitable access to health services even though the achievement had been inadequate(6).

Since 1998, Ethiopia has undertaken a range of reforms to address the deep-rooted health problems in the country and to meet the high-unmet demand for health care. The reforms in the health were taken in the context of the sector investment programme called the Health Sector Development Programmed (HSDP) (6).

Health Development program I introduced a four-tier system for health service delivery, characterized by a primary health care unit but it was with no exception to the expansion of higher-level health care services such as hospitals at the expense of primary health care (PHC) to serve the rural population of the country (more than 85 percent of Ethiopians live in rural areas) unfortunately reviews of the 1st HSDP (1997/98- 2001/02) indicated the challenges in achieving universal coverage of PHC, Recognizing the huge gap between need and health care services available, the Ministry of Health has introduced an innovative program called Health Service Extension Program (HSEP)focused on "providing quality promotive, preventive, and selected curative health care services in an accessible and equitable manner to reach all segments of the population, with special attention to mothers and children. The policy places particular emphasis on establishing an effective and responsive health delivery system for those who live in rural areas" (6, 7, 8,).

At the core of Health Extension Program implementation there is a sizeable cadre of new Health Extension Workers (HEWs), who are trained in a one-year programme to implement a Health Extension Package of 16 healthcare activities at the kebele, the smallest administrative level of the country. By 2010, more than 30,000 health extension workers (HEWs), almost all young women from the communities they serve, were trained and distributed in pairs to live and work at kebele -level throughout the country(11). As a preventive health program, the HSEP promotes four areas of care: Disease Prevention and Control, Family Health, Personal Hygiene and Environmental Sanitation, and Health Education and Communication. HEWs spend 75 percent of their time visiting families in their homes and performing outreach activities in the community they spend the remaining 25 percent of their time providing services at the health posts, including giving immunizations and injectable contraceptives, among other health and educational services(11). The Health Extension Workers also work in close collaboration with voluntary workers, such as community-based reproductive health agents (CBRHA) to provide reproductive health and family planning services at the household level and women lead health Development army facilitating Implementation and utilization of health extension service have been established in all kebeles and even below kebeles (12). As part of the country and Oromia region Lalo Kile woreda have been implementing and continue implementing health extension programme in all kebeles of the woreda.

1.2. Statement of the problem

The Health Extension Program is a key component and an implementation approaches for the Ethiopian Health Strategic Framework- the Health Sector Development Program (HSDP). The program is being implemented through the construction of health posts across the country, the training of health extension workers to manage these health posts and the provision of medical equipment, supply and drugs to keep the health posts functional. In line with these national targets, significant progress has been made in the implementation of the program nationally (12). The Program targets households particularly mothers & children. It is a package of promotive, preventive & basic curative health services. It is also an institutional framework for achieving the Millennium Development Goals (8)

Study conducted in wolayita zone was very much reflected concerns on HEWs in-service training as well as future career. Lack and shortage of basic drugs, that are recommended for a health post, poor and inadequate managerial and technical support, problems related to residential house (problems of attending labor during night time) Weak Integration between sectors in kebele to implement health extension program were observed (13).

Similar study conducted in eastern Gojjam on Extent and determinants of working conditions of HEWs also disclosed that HEWs implementation of communicable disease prevention and control package needing more effort. Health institution support, selection pattern and future aspiration had been identified as independent determinants of HEWs functionality (14).

A study conducted in Welkait by the year 2007, on a preliminary review of the impact of a specific group of HEWs, working in some of the most challenging conditions to be found in Ethiopia. Disclosed that the HEWs were not visited households, according to the standard and the reason was not addressed. Suggested the strengthening of support systems for HEWs may be a fruitful avenue for further investigation. The low levels of knowledge reported by participants regarding the major communicable diseases was very worrying. Suggested personal circumstances with no doubt to influence the topics HEWs discuss with women. The investigators have also recommend the use of focus group discussions with HEWs to explore the reasons why some topics are covered in some households, but not in others and perhaps to identify ways of enabling HEWs to more effectively advise on areas that they feel less comfortable discussing with householders(25).

The deployment of two HEWs in each Kebele has been achieved and also enhanced the empowerment of women to play their role in maximizing their decision making power both in the household & the community as well as to exercise their social and economic independency (11). To cover all rural kebeles in the woreda with the health extension program and achieve the universal access to health services, it was planned to construct 22 health posts till the end of 2010. However, the woreda has able to complete the construction of 21 (95.5%) health posts for rural kebeles in the woreda, to further accelerate the implementation of HEP, teams of command post consisting Health Extension Workers, kebele civil service and good governance heads, school director, Development Agents and Community Leaders have been established and community Level Women lead health development army network facilitating health extension service Implementation and Utilization were established(9).

Even though remarkable progress has been made in implementation of HEP, National Evaluation of the third HSDP show that Model households who have been trained and graduated have not reached the target households this represents only 26% leaving a huge gap on Implementation strategy (12). Survey conducted by 2011 show that about 63% of the total households in the country have graduated as a model family (13).This indicates the main Implementation strategy of the service doesn't achieve its target in seven years of implementation. According to implementation guide line it is indicated that all households will graduate as model family in the first two implementation years (10).

In addition to this Information the review of the literature showed that no studies have been done concerning health extension program, in the study area, even there was no report done on implementation of health extension service in Qelem wolega zone and adjacent zones found during the review of the literature (13,-18, 25-27). On the top of this background and the huge gap identified, it seems appropriate to explore its implementation in the rural community of the woreda.

Chapter 2: Literature Review

2.1 Access to Health Service

Different terms such as access, utilization, availability and coverage are often used to reflect on whether people are getting the services they need or not (4).Two main themes regarding the access concept appear in the literature. Some researchers tend to equate access with characteristics of the population (family income, insurance coverage, attitudes toward medical care) or of the delivery system (the distribution and organization of work force and facilities). Others argue that access can best be evaluated through outcome indicators of the individual's passage through the system, such as utilization rates or satisfaction scores. There are also many definitions of access to health services, with most researchers' related access to the timely use of services according to need (28).

2.2 Health Service Extension program in Ethiopia

Since 1993 the Ministry of Health (MoH) has developed a first national health policy, followed by four consecutive Health Sector Development Plans (7). During HSDP III implementation BPR of the health sector has introduced a three-tier health care delivery system which is characterized by a first level of a Woreda/District health system comprising a Primary Hospital, Health center and health posts form a Primary health care unit (PHCU) with each health center having five satellite health posts which is operational unit of the health extension service (9, 10,23).The Health Service Extension program have assigned two HEWs to each health post in rural parts of the country(8,10). The rural health extension workers were recruited from the communities in which they will work according to specific criteria. The criteria include they are female at least 17 years old, have at least a 10^{th} grade graduation, and speak the local language(8,10). Females are selected because most of the HEW packages are related to issues affecting mothers and children; thus communication is thought to be easier between mothers. The health extension workers spend more than 75% of their time by making home visits and communicating health messages in their communities(10, 15).

Different studies revealed that significant achievements were observed since the HEW started such improvements seen in the utilization rate of contraceptive and vaccination services. The HEW has also shown significant positive impacts on the health of communities, in disease prevention, family health, environmental hygiene and sanitation. Local government and community participation, the role and interest of development partners is also reported to increase (13-18,23-27).

An assessment (first intake assessment on the training of HEWs) done by the Centre for national health development Ethiopia, indicated that the health extension program implementation has the following problems: The selection process was dominated by the Technical and Vocational Education (TVE) Sector with minimal involvement of the health sector. Most trainees were selected from district towns. Another major weakness is that the health extension program seems to have attracted trainees with much lower grades compared, for example, to those in the regular TVES programs. The trainers are too few in numbers and therefore are overloaded. They feel insecure about their status as they feel lost between the TVET and the health sectors. The teaching/learning process suffers from a lack of textbooks, reference materials, inadequate practical/demonstration facilities and a compromised apprenticeship program in spite of last minute remedial efforts. The operational budget was clearly inadequate. The first group of HEWs is being deployed but district health offices and health centers seem ill-prepared to receive and put them effectively to work. Most district health offices do not have adequate staff and budget to ensure proper supervision and support (19).

Similar assessment was carried out on working condition of first batch of health extension workers by the Centre for National health development Ethiopia in 2006, indicated that shortage/ lack of equipment or supply, lack of regular reporting and feedback sharing mechanism, no assigned focal person at district level, lack of knowledge and skill in health education during training were the main problems that was observed(20).

Rapid appraisal assessment conducted by 2008 review also revealed that HEWs and VCHWs need capacity building through training in order to deliver the services expected of them. The following recommendations were forwarded to address the gaps identified. Improved supervision practices, Improved working conditions of HEWs, Improved logistics and supply, Improved

community based health information management system (HIMS) including using data for decision making, Monitoring, evaluation and reporting have to be strengthened at health post level; basic health statistics, documentation, and reporting. Improved participatory planning,) Improved transportation services for HEWs, Improved referrals, Referral Linkage between the health post and nucleus health center remains weak. Strengthening sectorial linkage and participation between government sectors in the villages like schools, development agents and extension workers in agriculture and rural development (21).

Study on working conditions of health extension worker conducted in 2009 indicated challenges in harmonizing the staffing pattern at the HP level, guiding time-use, work schedule and relationship with the community. There were no clear guidelines on relationship with other health workers at the community level, on career structure, transfer, and leave of absences, reporting and health management information system in general was weak (23).

Final evaluation of HSDPIII and implementation Plan of HSPIV indicated the following factors as challenges while implementing Health extension program. Adequate skill based trainings of HEWs particularly on conducting delivery. Attrition and absence of the HEWs from their catchments areas; Slow carrier development for HEWs; Lack of community ownership Low performance in completion of model household training due to poor follow-up at HP level and inadequate awareness of the community(12).Depending on those limitations discussed above the following conseptual frame work was deleloped.

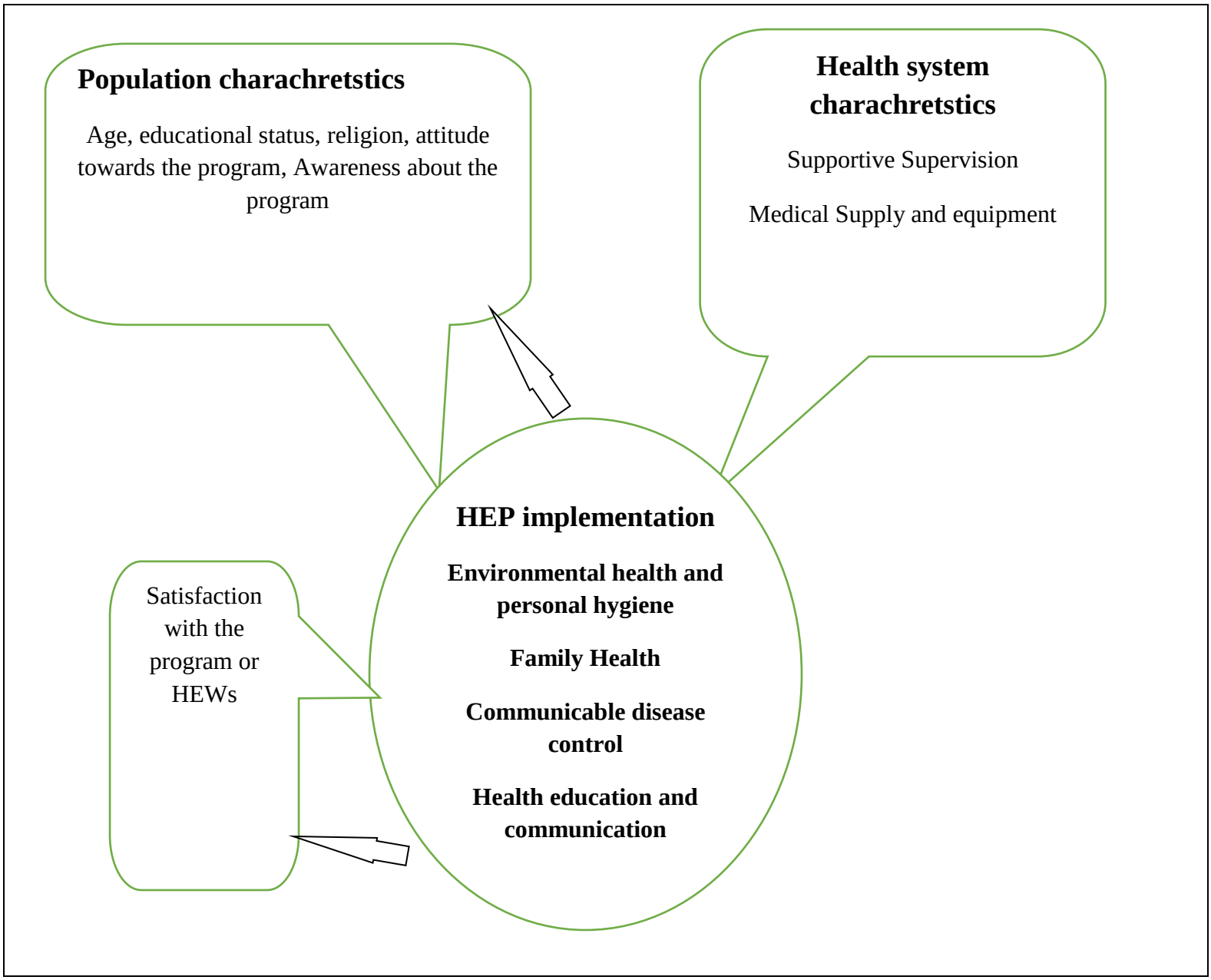

Figure1. Conceptual framework for Viewing Health Extension Services implementation in Lalo Kile woreda August 2013

Chapter 3: Significance of the study

During the implementation period of seven years there are some studies done on rural health extension service, but there is no survey conducted in the zone and even adjacent zones during literature review. On top of this HEW is Institutional frame work for the achievement of MDG directed to health and the time set for MDG will expire after 2 years. So to improve health of majority of population in rural part of the country, addressing health service extension program implementation gaps is equally important as any intervention to wards achieving target set by the health sector.

The finding of this study can provide policy makers and NGOs with relevant information for future planning and interventions of appropriate strategies to implement all packages of Health Extension services. Above all, since there is no research conducted in similar area of interest, in the study area, the finding of this study will serve as baseline information for all actors working to improve the health of rural population in Lalo Kile woreda and .

Chapter 4: Objectives of the study

4.1. General Objective

To assess the Implementation and factors affecting Implementation of rural health extension program in Lalo Kile woreda, Qellem Wolega Zone Oromia Regional State, western Ethiopia, 2013.

4.2. Specific Objectives

- To assess if the proposed services of Health Extension program are implemented.
- To assess communities' perception towards the program.
- To identify factors that affect health extension programme implementation.

Chapter 5: Methods and materials

5.1. Study Area and period.

The study was conducted in rural kebeles of Lalo Kile woreda (district), from October 14-November 14, 2013. Lalo Kile woreda is located 551km west of Addis Ababa and about 117 km East of Qelem Wolega Zonal capital, Dembi Dollo. The woreda is geographically located at $08^0$550'09'' N latitude and $035^0$21'251'' S longitudes. It is located west of Yubdo and Ayira woreda of west wolega Zone, northeast of Dale sadi woreda, southeast of Darimu woreda of Ilubabora Zone. There are 22 rural kebeles and 1 urban kebele in the woreda. Based on figures from the woreda Administration and health office, the woreda currently has an estimated total population of 71,964, among which 35,163 are males and 36,801 females. There are 12,994 households, among which 12514 are rural households in the woreda. Regarding government health institutions, four health centers and twenty one health posts are providing health services to the community.

Concerning human resource five midwives, two health officers, 29 different categories of nurses, 10 Paramedics, Forty four rural and two Urban HEWs are currently working in all the kebeles of the district from which three rural health extension workers are attending training for upgrading to diploma level. According to woreda economic and Finance development bureau the local economy is based on a mixture of cash cropping (mainly coffee) and subsistence agriculture (9).

5.2 Study Design

A community based cross-sectional study design utilizing both quantitative and qualitative data collection method was conducted.

5.3 Population

5.3.1 Source population

The source population of the study includes all rural households in Lalo Kile Woreda, all rural health extension workers, all women lead health development army leaders, all health posts, all rural health extension program supervisors and the head of the woreda health office.

5.3.2 Study population

In the quantitative survey, all sampled households in Lalo Kile Woreda were included and all Health posts. For qualitative purposively selected health extension workers, members of the

women lead health development army leaders, supervisors of health extension program, and the woreda health office head were included.

5.3.3. Inclusion criteria: -

Women head of HH who have lived in the area for at least six month, Head of health post, One Health extension program supervisor per health center, Women lead health development army leaders selected from two health centers catchment kebeles.

5.3.4. Exclusion criteria:

Severely ill and unable to respond during the interview.

5.4 Sample size determination and sampling technique

5.4.1 Sample size determination

For the household survey, single population proportion formula was used to determine the sample size.

$$n = \frac{z^2_{\alpha/2} p(1-p)}{d^2}$$

Where: n = sample size

Z = standard normal distribution corresponding to significance level at α = 0.05 Assuming expected proportion of health service extension packages being implemented to be 50% in order to get maximum sample size.

p = 0.50

q=1- 0.5= **0.5**

q =**0.5**

d = margin of error 5%

$$n = \frac{(1.96)^2 0.5(1-0.5)}{(0.05)^2} = 384$$

10% was added to the final sample size calculation for possible non-responses resulting due to various factors.

358+10 %(384) = 422. So, final Sample size were 422 households

For qualitative

Four focus group discussions each with nine participants were conducted with two groups HEWSs and two groups of women lead Health development army leaders. Five in-depth interviews were conducted with key informants HEWs supervisors (4), and head of woreda health office (1).

5.4.2 Sampling procedure

All of the 22 rural kebeles found in Lalo Kile woreda were included in the household survey. The total sample size was allocated among each of the kebeles according to proportionate to size of the households per each kebele. Depending on household head name document from the health post, random number was generated by using rand between function on Excel then corresponding household was visited. One respondent mothers and stayed at least for six month before data collection were included from every selected household.

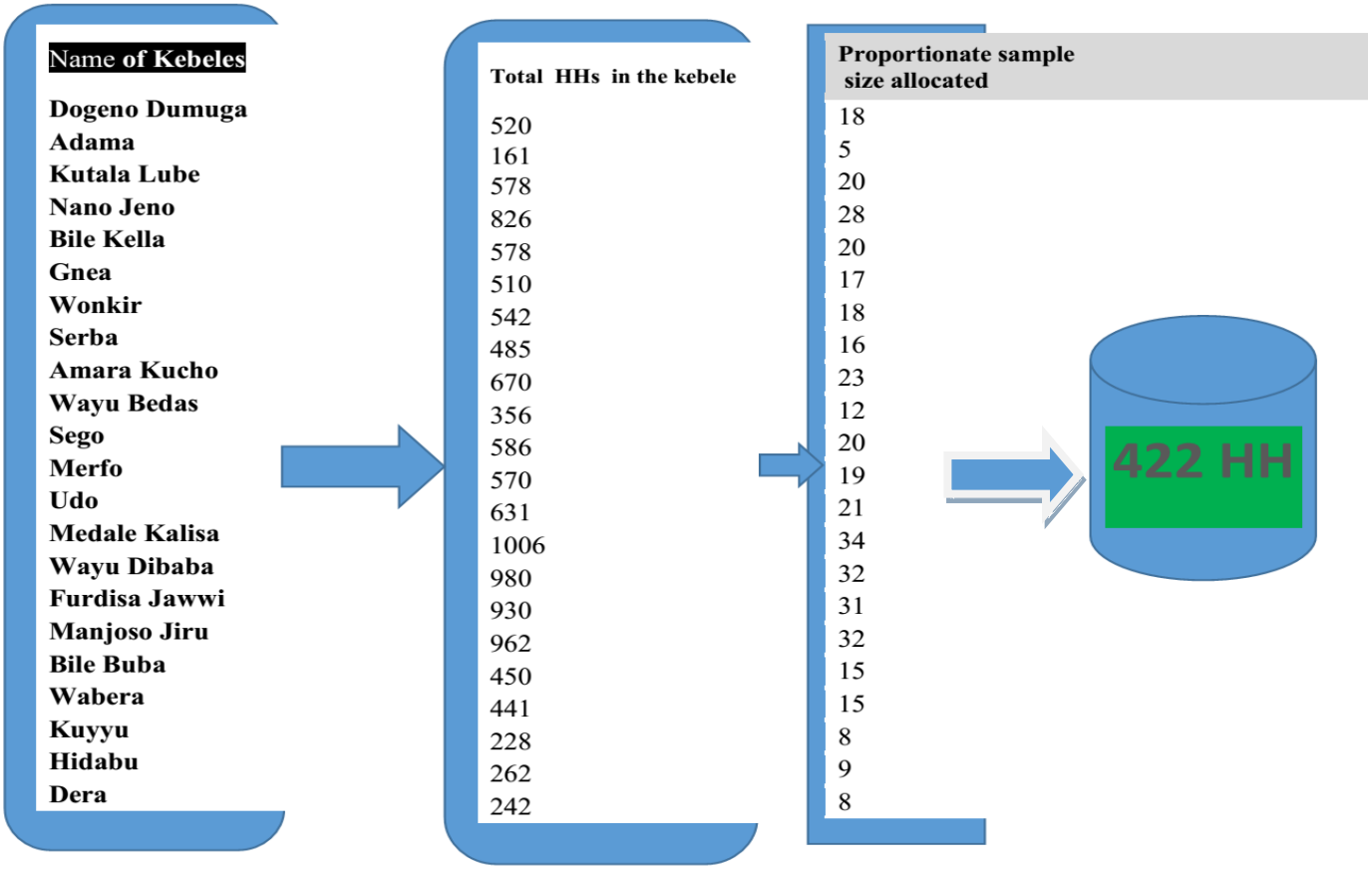

Figure 2: Schematic presentation of sampling procedure for the selection of study units in Lalo Kile woreda, Oromia Regional State, and west Ethiopia, 2013

For the in-depth interview, health extension program supervisors, and head of woreda health office were included and interviewed to assess the support system for the program.

Four focus group discussions was conducted, which constitute 18 health extension workers and 18 development army leaders who have the responsibility of facilitating the HEW service utilization by mothers was included .

5.5. Data collection instrument and procedure

For Household survey

Face-to-face interview of households was conducted using structured pre-tested interviewer administered questionnaire adapted from previous studies was used. The instrument had questions on basic socio demographic characteristics, household's socioeconomic status and other items for measuring the study variables. Eight grade 10 completed and trained Female data collectors were involved with the data collection. The interviewers were recruited from the study woreda having completed high school, speaking local language. Data was collected house to house by using those data collectors and on site supervision was conducted by two Diploma holding Public health Nurse Supervisors. In order to minimize bias, data collectors were not assigned in their residence kebele additionally observation checklist was used by PI in order to assess the supply of medical equipment's and drugs as well as the support provided to the program.

For FGDs and in-depth interview

Information on qualitative data was collected using focus group discussion and in-depth interview guides. Four focus group sessions of nine participants each were carried out with HEWS and Health Development army leaders. The principal investigator was moderator of the group discussion and the assistant moderator a health professional with BSc who have an experience in the field of research took detailed notes and recorded the voice of participants. In addition to focus group sessions, totally 5 in-depth interviews were conducted with health extension program supervisors, and the head of woreda health office. The assistant investigator was conducted the in depth interviews and took detailed notes.

5.6. Study Variables

Dependent variable

- Implementation of health extension service

Independent variables are:-

Client side is:-

- Socio demographic charachretstics
  Age of respondents, marital status, religion, Income of the HH, occupational status, of HH head.
- Attitude towards Health Extension Program.
- Awareness about health extension service, mode of service delivery, type of service from HEPs.
- Satisfaction with Health Extension service they get within six month, number of contact and information they get from health extension workers.

Provider side

- Availability of Medical equipment
- Availability of drugs and supply
- Supportive supervision.

5.7 Data processing and analysis

After data collection, each questionnaire were checked for completeness. Data was entered into database, cleaned and explored for outliers, missing values and any inconsistencies. For outliers and missed values found during the data exploration, causes was determined and if unable to determine causes, variables with missing value(s) and outliers were dropped out from analysis.

The data was analyzed using Statistical Package for Social Science (SPSS) version 16.0. Descriptive statistics like frequency tables, graphs and descriptive summaries were used to describe the study variables. In addition cross tabulation was computed using dependent and in dependent variables to determine the proportions of respondents and the existence of association between independent variables and some selected socio demographic characteristics of house hold respondents. Odds ratio and their 95% of confidence interval was calculated to assess the strength of association between the variables. To see the relative effect of independent variable on the dependent variable, logistics regression analysis was carried out.

Qualitative data was changed to written form and then translated into English language. Similar responses was grouped and summarized based on the thematic area or the key variables of the

study descriptively. Finally, results of the qualitative study was presented in narratives triangulated with the quantitative results.

5.6. Data quality control

To ensure the quality of data different mechanisms was engaged to avoid response biases, the questionnaire was prepared in English, translated into local language Afan Oromo and then translated back into English by experts in the field to maintain reliability of the instrument. Then the questionnaire was pre tested in Yubdo woreda Wara Gutu kebele by taking 5 percent of the sample size. Then necessary modification in the questionnaire was made based on the nature of gaps identified. A two days training was provided for selected female grade 10 completed data collectors and diploma holding supervisors on how to gather the appropriate information, procedures of data collection techniques and the whole contents of the questionnaire and purpose of the research. A day today on site supervision was carried out during the whole period of data collection by four supervisors. At the end of each day, the questionnaire was checked for completeness, accuracy and consistency by the supervisors and investigator and corrective discussion was made with all the data collectors and the supervisors.

5.7. Ethical consideration

Prior to data collection, appropriate ethical clearance was obtained from Jimma University College of public health and medical sciences. Formal letter of permission was obtained from the administrative bodies of the woreda to the kebeles. Letter of cooperation from kebele administrators was also obtained. Confidentiality was ensured for the information by not recording the name of the respondent or other identifiers. Verbal consent was requested from every study participant included in the study during data collection time after explaining the objectives of the study inform participants that the study will not harm them and they will participate voluntarily.

5.8. Operational definitions

Health extension service Implementation: a household reporting that any member of the household contacted by HEWs by home visit, at health post, at Farmer training center, at school or at any point of contact for any of the following: counseling or received any other services included in the rural health extension package during the last Six months except services provided during campaign.

If a household reported that any member of the house hold contacted by HEWs the mean service related contact and above HEWs implemented the program properly. If a household reported that any member of the house hold contacted by HEWs below the mean service related contact HEWs implemented the program poorly. If a household reported that any member of the house hold do not contacted by HEWs, HEWs have not implemented the program for the households.

Attitude: Predisposition to respond in favorable or unfavorable manner towards service related to HEWs during last six months and it was measured by asking the households to describe their attitude towards HEW using 10 questions. A five-point Likert Scale ranging from '1 strongly disagree' to '5 strongly agree' was used to express their opinions on statements regarding the general characteristics of the program and the HEWs behavior or attitude. The respondent have positive attitude towards HES if the mean score of individual attitude is above three, neutral if it is three and negative attitude towards the service if individual mean score is below three.

Support system: is the management related activities that support and enhance the delivery of services in the implementation of a program. It is measured with Number of supervisory visits received from Health center and woreda health office with written feedback. According to the standard, the health center should supervise and give feedback for the health post monthly while the woreda health office do the same thing quarterly so if both health center and woreda heath office provide 75% and above it is adequate 51-74% fair and below 50% poor support system from woreda health office and health centers

Functionality of Health post: Availability of service and support system (Monitoring, supervision, training, functional supply system, functional health committee) against the standards of the implementation guideline at the health post and it is assessed by observation

checklist. The minimum requirement are availability of two trained health extension workers per health post/ kebele and providing at least 50% of the HEP packages.

The process of service delivery: the process in the health extension service provision are training and deploying health extension workers, construction of Health post, Equipping the health post with furniture and medical equipment, supplying drug and supplies and support provided by the community, if the health post is constructed furnished and equipped with medical equipment opened to provide service during the observation it is functional otherwise it is not functional.

Model household: a household member, the head or the mother trained on 16n packages of Health extension service and graduated as a model family by HEWs any time before data collection.

Monthly income: It was measured based on Poverty line threshold set by World bank 2008, which is 1.25US dollar per day per person, so monthly income of the households were divided for house hold members and converted to current value of dollar which is 19 birr.

5.9. Dissemination of findings

The findings will be presented to Jimma university scientific community and was submitted to the department of health service management and college of public health and medical sciences. The findings will also be communicated to local health planners and other relevant stake holders woreda and zonal administration, zonal health bureau and regional health bureau and health post to enable them take recommendations in to consideration during their planning process. Publication in peer reviewed, national or international journals will also be considered.

Chapter Six: Result

Four hundred nine households were interviewed in the household survey giving a response rate of 96.9%. In-depth interviews were conducted and analyzed from 4 health extension program supervisors and a head of woreda health office. Four FGDs were conducted with two HEWs consisting each nine participants and eighteen women lead development army leaders selected from the community were involved.

6.1 Socio-demographic Characteristics of respondents

Descriptive statistical analysis indicated that the median age of household survey respondents were 36 year. Two hundred sixty five (64.8%) respondents were with no education while 98 (23.9%) attend primary school. On the subject of the ethnic origin, majority 403 (98.5%) were Oromo. Regarding their marital status, 391 (95.6%) of the interviewees were married, by religion majority (303 (74.1%)) were protestant, concerning respondents relationship with the household 371 (90.2%) were housewives. The median monthly family income of the respondent households were 1200 ETB and 87.5 % of the population monthly income is below the standard set by world bank minimum thresh hold of poverty line income (Table 1).

Table 1 Percentage distribution of respondents by selected individual characteristics in Lalo Kile woreda, Ethiopia, November 2013. (n=409)

Socio-demographic characteristics	No. of respondents	Percentage (%)
Status of respondent in the family		
Housewife	371	90.7
Relatives	24	5.9
House hold head	14	3.4

Age(year)		
18-22	30	7.3
23-27	64	15.6
28-32	71	17.4
33-37	59	14.4
38-42	63	15.4
43-49	65	15.9
50 +	57	13.9
Educational level		
No education	266	65
Only Read and write	14	3.4
1-4 grade	63	15.4
5-8 grade	35	8.6
9-10 grade	29	7.1
11-12 grade	2	0.5
Ethnicity		
Oromo	403	98.5
Amhara	6	1.5
Religion		
Protestant	303	74.1
Orthodox	60	14.7
Muslim	46	11.2

Household Size		
1-4	215	52.6
5-9	194	47.4
Monthly income		
below poverty line	358	87.5
above poverty line	51	12.5
self-perceived health status		
very good	28	6.8
good	128	31.3
normal	219	53.5
bad	28	5.5
very bad	2	0.5

6.2 Organization and Functionality of HEPs

The woreda had started implementing health extension program since 2004. Currently in the woreda, there are 41 HEWs. Almost All the kebeles had assigned two health extension workers per each kebele. Twenty one (96%) of the kebeles had constructed a health post having three rooms only one kebele providing the service in one room unfurnished and overcrowded condition for the catchment population.

Concerning availability of facilities and logistic, even though 95.5% (21) of the kebeles have constructed a health post, HEWs complain poorly equipped and furnished health post. All the health posts had supplies for family planning and rapid test kits for malaria diagnosis in their stock during data collection period. During the past three month before the visit, 7(32%) of the Health post experienced stock out of one or more of the supplies for family planning, malaria drug diagnostic test. Orders are reported to be requested on a standard written order form on regular basis to the health centers.

The study also reveals that none of the health posts possess all the supplies recommended by the guideline for first aid and emergency service (table 2).

Table 2: Availability of supplies for Health Extension service in Lalo Kile woreda, West Ethiopia, November 2013. (n=22)

Recommended List of supplies	Number of kebele /health posts having the supply during the visit which is enough for three months.	Number of health posts having a stock out in the previous three months
Oxytocin	0	0
Adrenaline	0	0
Paracetamol	0	0
ORS	22	0
ASA	0	0
Condom	22	0
Implanon	0	0
Depo-Provera	22	0
Ergometricmaleattles	0	0
GV	0	0

Continuation of Table 2: Availability of supplies for Health Extension service in Lalo Kile woreda, West Ethiopia, November 2013. (n=22)

Bandage	0	0
Alcohol	0	0
Antiseptic	0	0
Furacin	0	0
AD Syringe and needle	22	0
Disposable Syringe and needle	22	0
MUAC strips	22	0

Concerning medical equipment's from the list of equipment's that were recommended on the implementation guide line, which are around 11 only 10 of them were currently available even if some of them are not functional (table 3). Regarding availability of reference materials, all HP had at least one copy of the modules in oromifa or English language.

Table 3: Type of available equipment's by Health Extension program in Lalo Kile woreda, West Ethiopia, November 2013. (n=22)

Type of equipment recommended	Number of kebele health posts that had the equipment during the visit	Number of health posts that had functional equipment
Sphygmomanometer	21	14
Stethoscope	21	13
Digital Thermometer	21	21
Infant scale	15	8
Adult weighting scale	15	7
Stature	0	0
Fetoscope	21	21
Tape measure	21	21
Examination bed	21	21
Vaccine carrier	22	0
Refrigerator	9	3

In community health information, HEWs have been reported doing this, but it was not being continuously updated because most spend quite a high proportion of their time in the other activities.

The program is targeted to be implemented on different sites (community and households, Farmers training center and schools); but currently the service is functionally being given house to house and at health post. Regarding community health volunteers currently there are community health volunteers in all of the twenty two kebeles. All of the kebeles reported that

they already selected and trained the volunteers but there were no written evidence found on the topic of training and the name and number of volunteers.

Qualitative FGD with HEWS revealed that inter-sectorial coordination and integration of activities with the other developmental sectors were reported as weak. The relationship between HEWs and other sectors was not clearly established yet. Many public sectors have not taken the lead on committing support to HEWs and the services they provide.

6.3 Households awareness and attitude towards health extension service

Three hundred Forty one (83.1 %) of the respondents in the household survey were aware of the presence of HEWs in their kebeles and were able to mention at least one type of service they could get from HEWs. Most of them (336 (82.2%) saw HEWs primarily as a source of general information for health related issues.

Regarding the mode of service delivery, 336 (82.2%) of the households had mentioned house to house mode of service delivery. Two hundreds seventy four (67%) of households had mentioned health post while 211 (51.5%) mentioned both house-to-house visit and through visit to the health post.

The households were also asked to describe their attitude towards Health extension service and health extension workers using 10 question items. A five-point Likert Scale ranging from ‘1 which stands for strongly disagree’ to ‘5 strongly agree’ was used by respondents to express their opinions on statements regarding the general characteristics of the program and the HEWs behavior or attitude. The highest mean score 4.2 (±0.59) was measured for the item which asks households view on the house to house mode of service delivery and the service being delivered in health post. On the other hand, the least mean score 3.4(±0.75) was measured for the item, which asks households about the satisfaction of respondents availability of HEWs when needed. Based on the measurement, the mean score of the respondent households for the total attitude scale was 3.9 (±0.46). Additionally the study indicates that the mean satisfaction score of households towards availability of health extension workers when they are needed and the mean attitude score of households towards professional acceptance of HEWs were scored below the total attitude mean score.

Table 4: Descriptive results of households' attitude towards health extension services in Lalo Kile woreda, West Ethiopia, November 2013.

Characteristics	**Number of respondent**	**Strongly agree**				**Strongly disagree**	**Mean (SD)**
		5 N (%)	4 N (%)	3 N (%)	2 N (%)	1 N (%)	
General program characteristics							
Attitude on The service being introduced in your kebele	409	71(17.4)	236(57.7)	95(23.3)	5(1.2)	2(0.5)	3.9(0.7)
Belief that HES could improve your family's health	342	105(30.7)	172 (50.3)	61(17.5)	2 (.58)	0	4.1(0.72)
Attitude on house to house mode of service delivery	327	92(28.13)	202(61.8)	33(10.09)	0	0	4.2(0.59)
The service being delivered in health post in the kebele	331	91(27.5)	206(62.23)	34(10.27)	0	0	4.2(0.59)
Intention to have a regular contact with HEWs	346	90(26)	172(49.7)	56(16.18)	26(7.5)	2(0.5)	3.9(0.9)
Total Mean	**351**						4.06(0.6)

Satisfaction with the service from HEWs and by HEWs characteristics							
Explained things in terms I could understand	182	68(37.4)	96 (52.7)	3(1.65)	0	0	4.3(0.67)
HEWs have good Professional acceptance	306	19(6.2)	185(0.46)	40(13.07)	45(14.7)	17(5.56)	3.47(1)
Helpfulness of HEWs	409	120(29.34)	204(49.8)	59(14.43)	25(6.11)	1(.24)	4.(0.84)
HEWs are Available when needed	306	5(1.6)	166(54.2)	98(32)	44(14.3)	0(0)	3.4(.75)
Satisfied with number of contacts	306	3(.98)	209(68.3)	92(30.06)	2(0.65)	0	3.7(0.5)
Total Mean	301						4.0(0.6)
Total attitude scale	N=326						Mean(SD)= 3.9(0.63)

6.4 Implementation of health extension services

Three hundred six (74.8%) households reported that they have had service related contact with HEWs at least once in the previous six months prior to study period. The mean frequency of service related contact with HEWs in the last six month was found to be 2.9(±0. 9). Two third of the contact (204) reported that they were visited by the HEWs at their home (table 6). Regarding

the frequency of home visit, the mean frequency of home visit a household received in previous six months was found to be 0.9 (±1.02).

Depending on operational definition Implementation of Health Extension Program Households contacted health extension workers according to the standard (quarterly) was considered as a cut point for implementation level, so two and more service related contacts with HEWs was considered adequate implementation of the program, poor Implementation below two frequency of contacts and not Implemented are households with zero contact. Finally the result shows that HEWs implemented the service adequately only on 53.3% of households and on 21.5% of households HEWs implemented the program poorly While the program is not implemented on 25.2% of the households during six months of period.

Table 5: Location of service related contact with health extension workers in Lalo Kile woreda, west Ethiopia, November 2013. (n=306)

Place of contact	**Number**	**Percent (%)**
Home	204	66.7
Health post	170	55.6
FTC	61	20
Community meetings	16	5

By categorizing the contents of service related contacts in core HEP areas (disease prevention and control, family health, Environmental health and personal hygiene, and first aid and emergency services) the following results were obtained.

Of all the households in the study area, HEWs reported 6696(53%) of households had been trained and certified as model households so far. In comparison, household survey data indicates 356(87%) have been requested by HEWs to participate in model family training. From the 356 households who were asked to participate in model family training 196 (47.9%) of them were

willing to participate in the training. 148 (75.5%) of these households had finished their training and graduated. While, 48 households have discontinued the training, and, 160 (45%) households have not been willing to be trained as a model family. The reasons given by the household respondents were shortage of time (97(60.6%)) and lack of interest to be trained (63 (39.4%)).

HEWs participants informed that the main problem in model household training was characteristics of training place. They complained most of the people are living in scattered way and this demanded nearby training place with some demonstration work and some dwellers complain that they have no time. All service related contacts included some element of health education (table 8).

Table 6: Health Extension Packages addressed by the health extension workers in Lalo Kile woreda, West Ethiopia, November 2013. (n=306)

Themes	**Number**	Percent (%)
Environmental Health And Personal Hygiene		
Personal Hygiene	187	61.1
Latrine construction and utilization	238	92.5
Solid and liquid waste management	269	87.9
Water supply and safety measures	97	31.7
Food hygiene and safety measures	89	29.1
Disease prevention and control		
Prevention of Malaria	45	14.7
First aid and emergency	7	2.3
Family health		
Vaccination advice	54	17.6
Nutrition counselling	9	2.9

Family planning	120	39.2
Pregnancy and delivery care	11	3.6
Health education on different topics	182	59.5

* *Multiple responses were possible*

Discussions conducted with HEWs to explore the reasons why some topics are covered in some households, but not in others. The discussions indicate that the HEWs select the topics based on their perceived assessment of the household need. In all of the kebeles, HEWs reported they are delivering health education related to prevention communicable disease. From 306 households who had contacted HEWs in the previous two quarters, 182(59.5%) had reported receiving health education and/or advice related to disease prevention and control.

Women lead Health Development army leaders participated in the FGD reported that they have learned very important information about disease prevention. A female with age of 36, and no education discussant explained "*We learnt from HEWs that how much we are affecting our health and those of our children by open defecation on our farm land which will pollute our water source and we have been living with animals in the same room just like our ancestors*."

Regarding the packages in family health, in all of the Health posts HEWs reported they are providing family planning services (provision of oral contraceptives and injectable) regularly. Regarding the other services on family health package, HEWs reported delivering promotion of the maternal and child health services. Moreover, promotions of healthy behaviors like proper feeding habits (such as breast feeding, supplements for babies), nutrition for pregnant women and adolescent reproductive health counselling were also reported being delivered to the target population. Focus group discussion conducted with health development army leaders showed that the armies are contributing to wards the implementation of the program specially on Family health ,which includes activities like preparing traditional ambulance for transporting pregnant mothers to road side then Ambulance will come and take the mother to health center, this was to achieve zero home delivery plan. Regular discussion between the members on other health issue like family planning, immunization, baby nutrition and others were also reported.

From 306 households who had contacted HEWs in the previous two quarters, 180 (58.8%) had reported they have received health education on at least one of the packages included in family health package. One hundred thirty nine (49.50%) of them reported that they have received at least one service found in the family health package.

From 306 households who had contacted HEWs at least once in the previous two quarters, 180(58.8%) had reported they have received health education on at least one of the packages included in Environmental health and personal hygiene. Two Hundred thirty nine (78.2%) Households had received support in construction of sanitation facilities. The support include, among 344 of the survey households reported using latrine facility all of them reported that they had received advice and/or support from HEWs. From a total of 125 households reported using different kinds of solid waste disposal mechanism reported that they had received advise and/or support from HEWs. From a total of 108 households reported availability of hand washing facility near to the latrine all of them reported that they had received advice and/or support from HEWs.

Qualitative data also supported this finding. Participants from Women lead development army leaders age 28 and attended primary school felt that the program helped households use hand washing facility near to their latrines, waste disposal pits, use clean cooking practices, keep drinking water free from contamination and maintain clean environment.

The other key service areas are first aid, emergency and referral. Some of HPs (19%) in the study area had started providing first aid and emergency service but most of do not have supplies the only activity they are performing in this package the HEWs reported conducting was referral.

From 306 households who had contacted HEWs at least once in the previous two quarters 47(15.25%) had reported they have received help from HEWs for a sick person at home. From 195 households who had visited other health facility for different reasons 66(33.8%) of them mentioned a prior HEWs contact for referral.

Qualitative data from program supervisors, woreda health office head, HEWs and Health development army leaders indicated several multilevel factors that influence implementation of of the service at household level. Household level factors (awareness about HES, economic and educational status of the household members), delivery level factors (individual competencies of

HEWs, in adequate supply and curative roles of HEWs) and kebele level factors (local support for the HEWs) were the main themes emerged to strength this by quantitative data it was observed that the mean satisfaction score of respondents on availability of HEWs when they are needed and mean attitude score professional acceptance of HEWs scored below the total mean score of satisfaction and attitude respondents.

The HEWs reported that absence of some supplies in compliance with the guideline (first aid and emergency supplies) created a problem in the delivery of their services. Moreover, lack of supply according to the community need also results in dissatisfaction and resistance in some community members. For example, HEWs commented that some households like to be treated rather than just receive a health education only. However, currently their activities clearly limited to as health educators; yet some community members have not fully appreciated its' importance. HEWs also indicated that due to the failure to provide a wider range of services in accordance with the community need adversely affected their credibility thus created a refusal to their services the next time.

In addition to lack of awareness and supply issues, the other factor mentioned was economic and educational status of the household members. HEWs participated in FGD claimed that the degree of behavioral change and adoption of healthy practices in the community usually dependent on other societal factors. HEWs explained that economic status of households such as lack of materials to construct sanitation facilities like latrine and liquid waste disposal pits determine their adoption.

From the in depth interviews with supervisors, and woreda health office head themes emerged were Subjective attributes of HEWs, such as interest in their work and ability to communicate well with groups and individuals in the community were identified to affect the implementation of HEP by HEWs and utilization of the services by the community. The HEWs ability in teaching and communicating with community residents were also reported to differ among the HEWs. HEWs with good communication and interaction skills were reported to have built strong ties with the community members. They also indicated some HEWs were very keen to discharge their duties and responsibilities while there were also few HEWs who were not fully committed to their daily activities, which created the difference in the level of their activity.

HEWs reflected that institutional support from kebele leaders could serve as the bridge for enhancing relationships between them and households. They also felt that it could assist in bringing public recognition to their work thus build their image within the community. The HEWs raised a number of examples how kebele leaders could serve as the bridge for enhancing relationships between them and households.

The role of kebele support in mobilizing the community and managing reluctant households was also highly acknowledged by the program supervisors and woreda health office head. They also reported in kebeles were successful participation is there between kebele leaders and HEWs to work together and support each other there is relatively better HEWs job done. All the participants across the groups reported that they were really witnessing progress in a way the program perceived by the people. The increasing Latrine construction and utilization, increased family planning acceptors, and the decrease in number of resistance of households from the starting of the program to this time were mentioned as an indicator to determine the progress.

6.5 Supervision and support to HEPs

Regarding supervision, previously there were four supervisors assigned for each of the four health centers. However, currently it has changed one supervisor posted for each health posts. Each health centers has 5-6 health post. The data indicates that all of the kebeles had four to eight supervisory visits from their supervisors monthly. Only 36% of health posts reported and observed that their supervisors use supervisory checklist, provide written feedback on their performance, review registers, assess for stock outs and distribute medicine supplies as needed. Almost consistently, HEWs agreed that the supervisors help and assist them in gaps, which need assistance.

In addition to individual supervisory visits, some HEWs and health extension program supervisors reported that they have a weekly review meeting. The meeting involves HEWs, supervisor and kebele managers, women representatives, youth representative and school director. These weekly meetings reported to enable the participants to report their progress, plan for the next together, discuss on activities conducted and solve problem jointly but observation done on health posts support indicates that only eight kebeles (36%) have weekly meeting plan even it was not continuously conducted.

The woreda health office has one representative from the Maternal and child health case team, which has responsibility for monitoring and supervision of the program. HEWs reported that at least one supervisory visit from the woreda health department every 3 months and quarterly review meeting. HEWs reported that the compiled report from them reviewed and discussed thoroughly in quarterly review meetings. After the review, the woreda health office gives feedback orally and in written form.

In addition to the supervision and monitoring activities, supervisors are also arranging regular meetings with a group of HEWs. The meetings usually held at a health center convenient as possible for the HEWs. This was reported to create an opportunity for HEWs to ask questions, raise issues that they have encountered in providing service to families and solicit support and assistance from supervisors and other HEWs.

In view of the kebele administration support to the program, majority of HEWs reported that kebele leaders are supportive of the program. However, Some HEWs participated in the FGD reported that there is low motivation from the kebele administration towards the program. Similarly, supervisors and woreda health office head felt that there is difference in kebeles on the level of support and involvement in the program.

6.6. Association between Variables

Bivariate analysis shows none of socio demographic characteristics, status of respondents had shown significant association with the presence of contact with health extension workers only one significant association was found which, is awareness about health extension program and Respondents aware of the health extension program in the kebele and mentioned some services from Hews and at least one mode of service delivery are **2.4** times **(1.05-5.5, CI 95%)** more likely to contact health extension workers than those who are not awared by binary logistic regression. For further analysis candidate variables were included in multivariate analysis having P-value <=0.25 but none of these variables has shown significant predictor of the dependent variable (table 7).

Table 7. Multi variate Logistic Regresion showing Association of variables

Characteristics	Contacted by HEWs (%)			
	Yes (%)	**No (%)**	**COR** (95%CI)	**AOR** (95%CI)
Educational status of respondents.				
No education	220(85.3)	38(14.7)	0.173(.011-2.821)	0.157(0.010-2.6)
Read and write	11(84.6)	2(15.2)	0.182(.008-4.263)	0.193(0.008-4.6)
1-4	37(66.1)	19(33.9)	0.514(.030-8.671)	0.475(0.028-8.84)
5-8	20(66.7)	10(33.3)	0.500(028-8.853)	0.468(0.026-8.86)
9-10	17(65.4)	9(34.6)	0.529(.030-9.499)	0.519(0.029-9.36)
11-12	1(50)	1(50)	1	
Religion of respondents				0.546(0.25-1.19)
Protestants	251(82.8)	52(17.2)	0.646(.306-1.366)	0.963(0.38-2.44)
Orthodox	44(73.3)	16(26.7)	1.164(.474-2.86)	0.546(0.86-4.7)
Muslims	35(76.1)	11(23.9)	0.344	
Awareness about HEP				
Yes	294(86)	42(14)	**2.4(1.05-5.5) ***	2.008(0.859-4.7)
No	12(35)	22(65)	0.121**	.911

* Significant at p<0.05,** Significant at p<0.001

For attitude and satisfaction questions after conducting principal component analysis in order to identify the most important attitude questions (data reduction) it was observed that two attitude questions contacting HEWs on regular basis and attitude on contribution of Health Extension program implementation for the community were identified and both variables explaining total variance of 88.7%, then the two variables were treated as continuous variable and Linear logistic regression was conducted (table8).

Table 8. Linear Logistic regression of selected variables

Charachretstics	Unstandardized Coefficients		Standardized Coefficients		95% Confidence Interval for B	
	B	Std. Error	Beta	Sig.	Lower Bound	Upper Bound
Contact with Health Extension workers	-0.09	0.109		.000	-.224	0.206
attitude about contacting health extension workers on regular basis	-.0246	.039	0.497	.000	0.170	0.321
attitude about the contribution of health extension program for the community	0.048	.039	.096	.220	-.029	.124

Final model of linear regression identified only one predictor which is contacting HEWs on regular bases and an increment in one unit on attitude question responses, from strongly disagree to disagree, from disagree to neutral , from neutral to agree and agree to strongly agree will result in **0.497(0.170-0.32CI 95%)** more likely to be contacted by HEWs.

Chapter 7: Discussion

The study found out that 74.8% households had some service related contact with HEWs during the previous six months. The data also showed that only 66% of the households were receiving home visit during a period of six month which is below the standard set by FMoH guideline, according to the standard all Households should be visited quarterly(10). This seemed to be the consequence of overlapping training, meeting with different stakeholders as reported by HEWs.

It was encouraging that all the contacts include some component of health education. However, most of the topics discussed were on environmental health, and family health, other topics were discussed relatively less. This is similar with the study done in Welkait, Ethiopia that reported a difference in the type of topics discussed (25). Even though, according to the guideline, it is possible that HEWs judge that not every household needs education on all of the issues but It seems likely that the coverage of some issues like HIV/Aids, nutrition, adolescent Age reproductive health were less than optimal, which is below 5%(10).

According to MOH guideline, the strategy of training and recruiting model family is an appropriate way of promoting health interventions that has a major impact on the health of the households and communities (10). Studies done on rural health extension reported that the model families were able to become role models to exhibit themselves as clean and healthy families. They can also influence unwilling households to make use of the interventions in the health extension package (13-18,24-26).

The implementation guideline requests for all households in the area to be graduated as a model family within the first one and half years of program implementation time (10). With this respect, this study had disclosed that the model family training 38% on the study population, this is somewhat greater than the report by HSDPIII final evaluation 26% (12), Even if model Family training and graduation not is happening at the rate expected in the study area. Possible explanation for the difference could be the difference in time of report.

An increment in one unit on contacting Hews on regular basis attitude question responses, from strongly disagree to disagree, from disagree to neutral , from neutral to agree and agree to strongly agree will result in **0.497(0.170-0.32CI 95%)** more likely to be contacted by HEWs.

The mean households satisfaction score on availability of health extension worker of HEWs were scored below the total mean score of overall satisfaction questions so this may be a factor for the program implementation and utilization because if HEWs are not available when they are needed they will search for other opportunities.

Similarly experience elsewhere on community health workers found community acceptance as an important element for greater use of services (31,42,44). Study done on more than 30 different countries to identify approaches for increasing the community's utilization of community health services suggested improving acceptability of community health workers as a main approach (41).

The qualitative study revealed that HEWs individual characteristics like communication skills determine the difference in levels of activity and use of interventions (both receiving the intervention and adhering to its implementation at in the home). This result is similar with different papers on Community health workers with different data collection methods which indicated individual characteristics of Community health workers determined acceptance of the service (31,35,42,46).

The study found out even though there are listed drugs and medications recommended on the implementation guideline that will enable the HEWs to be able to Provide focused antenatal care; attend precipitated deliveries, fever management in under five and screening of malnutrition via mid-upper arm circumference strips independently. Due to the absence of the supplies, deliveries of such services by HEWs were not fully conducted in the study area. The lack of some medicines and supplies for HEWs that are consistent with guideline and in line with the community felt need were perceived to affect trustworthiness of HEWs. Reduced credibility of HEWs reported to have a negative consequence for use of the other HEWs services.

These results are similar with findings from studies done in other community health workers. Parlato and Favin(48) In their review of 52 community health worker projects implicated that if community health workers do not have a necessary supply and cannot perform their duties; they lose support and credibility from the communities they serve. They also suggested that lack of credibility from the community could diminish acceptability and utilization of the community health workers' service. In addition, different papers on the evaluation of community-based health services have pointed out that prevention is extremely hard to sell in all public health programs. When some curative care is offered, it is generally more welcomed and appreciated by the residents(35,42,49).

The findings also indicate that a kebele structure could be a helpful point of contact to increase the implementation and service utilization. These could be demonstrated through resolving conflicts arising out of HEWs with households, such as those who refuse to contact HEWs.

Similarly different literatures on community health workers also acknowledged the role played by local administrations in building the community workers image hence increase community health workers acceptability and utilization (32,40,47,50).

This study also compared the HEPs functionality and the support they get against the implementation guideline (10). One of the main finding of this study was the lack of quality of the workplace infrastructure (e.g. poorly equipped buildings and medical equipment), while there does not seem to be any guiding principles on the specification of health posts, the study revealed that not all the intervention packages in a community could be done if HEWs are working in poorly equipped three room health post and without essential medical equipment's recommended with the guideline.

These results are also similar to studies done on the health extension program which reported shortage of facilities and equipment(17,18). Issues such as, equipment and supplies and have also been identified as a weak link in community health worker programs in different studies done in another countries (32,34,40,51).

The study revealed only 36% HP were reported and observed that their supervisors used supervisory checklist provide written feedback on their performance, review registers, assess for stock outs and distribute drug and supplies needed. This result is the similar with studies done

on the program which reported lack of meaningful supervision as a problem (25-,27). This may be because of the reported obstacles that impede supervisory visits in rural areas; which are, often difficult and expensive transportation are more in the case of rural settings.

Strength and Limitation

The study considered the most beneficiaries of the program as respondents**,** and it also has limitations; six-month history of contact could be subjected to recall bias. The Socio-demographic charachretstics of HEWs are not included in the study,

Chapter 8. Conclusion and Recommendations

8.1 Conclusion

- The study found that Health extension workers implemented the program only on 53% of households in the study area according to the implementation line.
- The findings have revealed that attitude of the respondents on contribution of program for the community has significantly association with the implementation of the program.
- HEWs visited households less often than recommended in the guideline, even there are higher number of HEWs in relation to households.
- General satisfaction of most of the households with the program is acceptable while satisfaction on professionalism of HEWs gets low positive response rate. This could reflect the HEWs contribution to the household level extension of health care system and the growing primary health service coverage to the rural population is improving.
- Lack of logistics and supply were the primary reason for not delivering all the intervention packages in a community this is particularly for emergency and first aid conditions.
- The HEP in the study area was found to be implemented mostly at the household level and health posts.
- The qualitative study findings also showed that inter-sectorial coordination and integration of activities with most of developmental sectors were reported to be weak.
- Health development army leaders together with their members are found to be the most essential structure through which all health related issues are discussed, solved and reported at grass root level below kebele.

8.2 Recommendations

- Oromia health bureau in collaboration with Different partners, Zonal Health Department and the woreda health office should fulfil the necessary supplies for first aid and emergency activities to the HEP.
- Woreda health office and health centers should conduct regular and meaning full supervision according to the standard and with written feedback.
- HEWs Supervisors should conduct regular and supportive supervision according to the standard.
- Even though, the kebele health committees exist, it's functioning and regularity should be strongly promoted to all kebeles to strengthen the health agenda and ensure inter-sectorial measures in their kebeles by kebele leaders
- The Health center should promote kebele health committee to ensure high level and effective community participation and acceptance of the program.
- Health Development army should be promoted and strengthen in all 1-5 network of the woreda.
- HEWs should work towards increasing positive attitude of women on the contribution of the program to the community.
- HEWs should use participatory planning of interventions by forming a functional health development army.

Reference

1. Primary Health Care: Report of the International Conference on Primary Health Care, Alma-Ata, U.S.S.R. [Internet]. WHO GENEVA; 1978 [cited 2013 march 5]. Available from: www.who.int/hpr/NPH/docs/declaration_almaata.pdf

2. Plan American health organization. Celebrating the 25th Anniversary of the Almata Declaration and Primary Health Care [Internet]. World health organization; [cited 2013 April 16]. Available from: http://www.paho.org/

3. Lawn JE, Rohde J, Rifkin S, Were M, Paul VK, Chopra M. Alma-Ata 30 Years on: Revolutionary, Relevant, and Time to Revitalise. Lancet. 2008; 372:917–927.

4. World Health Organization. Toolkit on Monitoring Health Systems Strengthening Service Delivery.WHO Document Production Services, Geneva, Switzerland. WHO Document Production Services, Geneva, Switzerland; 2008.

5. Schaay N, Sanders D. International Perspective on Primary Health Care Over the Past 30 Years.In: Heggenhougen HK and Quah S ,editors .Primary Health Care.InternationalEncyclopedia of Public Health,. San Diego: Academic Press. 2008; vol. 5:pp. 305–316.

6. Kloos H. Primary Health Care in Ethiopia Under Three Political Systems : community Participation in War -Torn Society. Soc. Sci. Med. 1988; 46(4):505–522.

7. Federal Ministry of Health. Ethiopia Health Sector Development Programme (HSDPI), 1997/98 -2001/02, Final Evaluation, Volume II Addis Ababa. 2003

8. Federal Ministry of Health and Regional Health Bureau. Ethiopia Health Sector Developm Programme (HSDP II), 2002/03 – 2004/05, Final Evaluation, Addis Ababa. 2008

9. Lalo Kile district 2012/2013 fiscal year annual report report

10. Federal Ministry of Health. Health Service Extension Programme Draft Implementation Guideline Addis Ababa. 2005.

11. Ethiopian Health Extension Programme [Internet]. [Cited 2012 Nov 30]. Available from: http://www.ppdafrica.org/index.php/en/publications/documents/139-ethiopiaHEW

12. Federal Democratic Republic of Ethiopia Ministry of Health. Health Sector Development Program IV 2010/11 – 2014/15 final drafts. 2010

13. Sefihun B. Assessments of the factors that affect the implementation of Health Extension Program in Wolayeta Zone; 2007).

14. Getachew .H, Assessment of the extent and determinants of functionality of health extension workers in **e**ast Gojjam Zone, Amhara Regional State, Ethiopia.

15. Nejmudin KB, Christopher H, Herbst, Feng Z, Agnes S, Christophe L. Health Extension Workers in Ethiopia: Improved Access and Coverage for the Rural Poor. PunamChuhan-Pole, MankaAngwafo editor's .Yes Africa Can Success Stories from a Dynamic Continent. 1818 H Street NW, USA; the International Bank for Reconstruction and Development / the World Bank; 2011. P. p.433–44

16. Giday T, Asnake M, Wilder J. Ethiopia's Health Extension Program: Pathfinder International's Support 2003-2007. USAID and pathfinderintermational Ethiopia; 2008.

17. Hailom B. Ethiopia's Health Extension Program: Improving Health through Community Involvement. MEDICC Review. 2011; 13, (No 3).

18. Banteyerga H. Rapid Appraisal of Health Extension Program: Ethiopia Country Report Final Report, Addis Ababa. 2008.

19. Yayehyirad K. Assessment of the first intake of Health Extension Workers in Ethiopia. Ethiop.J. Health. Dev. 2007; 21(3):232-239

20. Centre for National Health Development in Ethiopia. The Earth Institute at Columbia University: Assessment of working conditions of the first batch of Health Extension Workers. Addis Ababa: Centre for National Health Development in Ethiopia; 2006).19.

21. (L10Km, rapid appraisal assessment of health extension program, 2008).

22. Kahssay, M.H., Taylor, M., and Berman, P. (1998). Community health workers: the way forward. WHO, Geneva.)

23. (Awash T. Yayehyrad K. Asfawesen G/Y. Samuel G.Hailu D. Akillu S et al. Working Conditions of Health Extension Workers in Ethiopia. Ethiop.J. Health Dev.2007; 21(3):246- 259).

24. World Bank (1994). Better health in Africa. Experiences and lessons learned. World Bank, Washington, DC.

25. Negusse H, McAuliffe E, Mac Lachlan M. Initial community perspectives on the Health Service Extension Programme in Welkait, Ethiopia. Bio Med West. 2007 Aug 24; 5(21).

26. Bekele, Kefale M, Tadesse M. Preliminary Assessment of the Implementation of the Health Services Extension Program: The Case of Southern Ethiopia. Ethiop.J.Health Dev. 22(3).

27. Sebhatu A. The Implementation of Ethiopia's Health Extension Program an [Internet]. 2008 [cited 2013 March 27]. Available from: http://www.docstoc.com/docs/19318722/The-implementation-of-Ethiopias-Health-Extension-Program-An

28. U.S. Department of Agriculture. Health Services in Rural America, p. 23. Agriculture InformatioBulletin No. 362. Washington: USDA, Rural Development Service, 1973.)

29. Global Health Workforce Alliance.
GHWA task force on scaling up education and training for health workers. Country case stu dy: Ethiopia's human resource for health programme. Geneva, Switzerland: Global Health Workforce Alliance [Internet]. World Health Organization. 2008 [cited 2013 March05]. Available from:http://www.who.int/workforcealliance/knowledge/case_studies/Ethiopia.pdf

30. World Health Organization. The Primary Health Care Worker: Working Guide. WHO Geneva; 1990.

31. Lehmann U, Sanders D. Community health workers: What do we know about them? The state of the evidence on programmes, activities, costs and impact on health outcomes of using community health workers. WHO and Evidence and Information for Policy. 2007 Jan; p 17.

32. Who Regional Committee for the Em/Rc50/8 Eastern Mediterranean. Primary Health Care: 25 Years after Alma-Ata. 2003.

33. Peter A, Davidson R, Gwatkin, Susan E. Community-based health workers: head start or false start towards health for all? Social Science and medicine. 1987; 25(5): pp. 443–459,

34. Oxford University Press. Evaluating community- based health promotion initiatives: an ongoing necessity and challenge. Health Promotion International, Vol. 23 No. 4; 23(4):229–301.

35. The United Nations Children's Fund (UNICEF) Regional Office for South Asia. What Works for Children in South Asia Community Health Workers? Health and Nutrition Section UNICEF Regional Office for South Asia; 2004.

36. World Health Organization. The Primary Health Care Worker: Working Guide. WHO Geneva; 1990.

37. Kroeger A. Anthropological and socio-medical health care research in developing countries. Soc. Sic. Med. 17(147):1983.

38. Lani RM, Ann B, Janet M, Jack R, La Rue S. Community health workers: a comparative analysis of pricor-funded studies. Primary Health Care Operations Research Project Centre for Human Services 5530 Wisconsin Avenue Chevy Chase, Maryland 20815 USA; 1978.

39. Dower C, Knox M, Lindler V, O'Neil E. Advancing Community Health Worker Practice and Utilization: The Focus on Financing. San Francisco, CA: National Fund for Medical Education; 2006.

40 Filippo C, Bhola S, Cecilia L, Massimo L, Ranieri G. Improving skills and utilization of community health volunteers in Nepal. Soc. Sic. Med. 1995; 40(8):1117–25.

41. Karabi B, Peter W, Karen L, Marie T. Community Health Worker Incentives and Disincentives: How They Affect Motivation, Retention, and Sustainability. Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington, Virginia; 2001.

42. Berman PA. Village Health Workers in Java, Indonesia: Coverage and Equity. Sot. Sic. Med. 1984; 19(4):441–422.

43. Christel S, Rolf K. Primary health workers in north east Brazil. 1993; 36(6,):775–82.

44. Crigler L, Hill K, Furth R, Bjerregaard D. Community Health Worker Assessment and Improvement Matrix (CHW AIM): A Toolkit for Improving Community Health Worker Programs and Services. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC). 2011.

45. Mangelsdorf KR. The selection and training of primary health care workers in Ecuador: issues and alternatives for public policy. Int J Health Serv. 18(3):471–493.

46. CORE Group, Save the Children, BASICS and MCHIP. Community Case Management Essentials: Treating Common Childhood Illnesses in the Community. A Guide for Program Managers. CORE Group, Save the Children, BASICS and MCHIP; 2010.

47. Parlato, M, Favin M. Progress and Problems: An Analysis of 52 A.I.D. Assisted Projects. Washington, DC: American Public Health Association,; 1982.

48. Van Der Geest S. Village health workers as medicine sellers? Int. J. Health Planning and Management. 1992;7(185).

49. Patrick B. Effectiveness of community health workers (CHWs) in the provision of basic preventive and curative maternal, new-born and child health interventions: a systematic review. Health policy and development. 2009; 7 number 3 December 2009(3):162–72.

50. Haines A, Sanders D, Lehmann U, Rowe A, Lawn, J. Jan S. et al. Achieving child survival goals: potential contribution of Community Health Workers. Lancet. 2007; 369((2121)):2121–2131.

51. Katharina H, WimVan D, George W. Erik S, and Yibeltal A. Anna C, William M. Health Workers for ART in sub-Saharan Africa: learning from experience – capitalizing on new opportunities. Human Resources for Health. 2009; 7(31).

Annexes

I. Informed Consent for House-to-House Survey on the utilization of health extension services in Lalo Kile woreda QellemWollega Zone, Oromia regional state , Western Ethiopia, 2013

Dear Sir/madam

Hello, my name is _____ and I am working in research team from jimma University College of public health and Medical sciences, Department of health service management and planning. We are conducting a survey in your kebele. The purpose of the survey is to gather information on health extension service utilization the information will help us in learning more about how well the program is being utilized and how it can be improved. Your household is one of the households in this kebele that have been randomly chosen to participate in this study Your cooperation and willingness for the interview is helpful in identifying problems related to the subject matter selected. Therefore, I would like to ask you some questions. The questions may take up to 30 minutes on average, the answers you give will not be shown to anyone and your name will not be written on the paper and your participation will not harm you and your family.

We especially want your answers because if everyone who is selected participates, our information was more valid and useful So You are kindly requested to participate voluntarily .Are you willing to continue?

1. **Yes,** please arrange for a private setting to conduct interview 2. **No**, end the interview;

II. English version Household Survey questionnaire

Please Circle on the number corresponding to the answer given by the respondent in the box in front of the question. If the answer sleeted is 'other' and required answer to be specified, circle the 'number' for 'other' in the box in front of the question and write the specific answer in the space provided. Please write very clearly**.**

Part I:Socio-Demographic and Socioeconomic characteristics			
S.NO	QUESTIONS	CODING CLASSIFICATION	Skip to
001	Status of respondent in the family? (read out the answers)	1=Household head 2= House wife 3=Relatives	
002	Respondent age in years (write the age in the corresponding box)	1 =_____	
003	What is your marital status?	1=Single 2=Married 3=Separated 4=Divorced 5=Widowed	
004	Religion	***1***= Protestant ***2***= Orthodox Christian ***3***= Muslim ***4***= Wakefeta ***5***= Other specify ( )	
005	Ethnicity	1= Oromo 2=Amhara 3=Gurage 4=Tigre 5=Others (specify)_____	

006	Educational level of respondent	1=Illiterate 2= Able to read and write without formal education 3=mention the highest grade completed _____	
007	Number of household members by age and sex ?read out the answers) (write the total number of persons in that household for each age group)	1) <= 5 years= M_____F_____ 2) 6-15 years = M_____F_____ 3) 16-49 years = M_____F_____ 4) 50-60 years = M_____F_____ 5) above 60 years = M_____F_____ 6) Total family member_____	
008	Highest educational level in the household?	1=Illiterate 2= Able to read and write without formal education 3= mention the highest grade completed_____	
009	Occupational status of household members Select from the following list 1) Farmer 2) Housewife 3) Merchant 4) Government employee 5) Daily laborer 6) Student 7) Other (Specify	House hold member 1.mothers _____ 2. Head of the house hold (father)_____	
010	How much total income did you and your family receives monthly, from all sources? (Estimated in Birr)	1. _____	
011	How much money do you spend monthly (for food, clothes, schooling, health and all others) (Estimated in Birr)	1. _____	
012	Owner ship of the house?	1. Privately Owned 2. Rented 3. Other	
013	What kind of toilet facility does most members of your household use?	1=Privâtes latrine 2=Communal latrine 3= Public latrine 4= No facility/bush/field → 019 5=Other(specify) _____	019

014	Have you received any advice and/or support from other bodies outside the family to construct the latrine?	1=Yes 2= No →	016
015	If the answer for Q 014 is yes from whom you received the advice/support from?	1= HEWs 2= VCHWs 3= Model families / development army leaders 4= Others	
016	Does your household have any hand washing facility near to the latrine?	1=Yes 2=No →	019
017	Have you received any advice and/or support from other bodies outside the family to construct the hand washing facility?	1=Yes 2=No →	019
018	If the answer for Q 017 is yes, from whom you received the advice/support from?	1=HEWs 2=VCHWs 3=Model families / development army leaders 4=Others	
019	What kind of facility /method the household uses to dispose liquid waste?	1=Liquid vaste disposal pit 2=Latrine 3=None /open field	
020	If the answer for Q 019 is 3 Have you received any advice and/or support from other bodies outside the family to construct liquid waste disposal pit	1=Yes 2=No →	023
021	If the answer for Q 020 is yes from whom you received the advice/support from	1=HEWs 2=VCHWs 3=Model families Or development army leaders 4=Others	
022	What kind of facility /method the household used to dispose solid waste	1= Dumping 2= Burning 3= Road side 4= Other (specify)	

Part II :General health care Utilization and preference			
S.NO	QUESTIONS	CODING CLASSIFICATION	Skip To
101	Has any member of your household received any Services at a health facility at any time in the past 6 months?	1=YES 2 =NO →	104
102	For what kind of service do you use the health facility? (choose the service type used) (Write the number of the type of health facility used in front of the service on space provided more than one response possible) 1= Went government health center directly 2= Went government hospital directly 3= Went private clinics 4= Went drugs vender 5= Went traditional healer 6= Other specify_____	1= Treatment for a sick child? _____ 2= Emergency treatment for malaria? _____ 3= Emergency treatment for diarrhea? , _____ 4= For general consultation about health? _____ 5= For First Aid , _____ 6= Immunization/growth monitoring? _____ 7= Family planning services? _____ 8= Antenatal /postnatal/delivery care? _____ 9= Others (specify)_____	
103	For any of the services you used have you been referred by HEWs?	1=YES 2 =NO	
104	Generally How do you see yours and your family general health status	1= Very good 2= Good 3= Normal 4= Bad 5= Very bad	

PART III : Questions Regarding Awareness and Attitude			
NO.	QUESTIONS	CODING CLASSIFI CATION	Skip to
201	Have you heard about health extension workers	1 = yes 2 = No	
202	If yes, from where did you hear about health extension workers	1 = From HEWs 2 = From volunteer community health worker 3 = From radio or television 4 = From friend or relative 5 = From other members of the community	
203	Do you know the health extension workers assigned in this kebele?	1=yes 2= No →	205

204	How do you and your family see the start of Health extension service in your kebele?	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	
205	Which type of service could you receive from the HEWs?	1. Advice on health and health related issue 2. Information/counselling during illness 3. First aid &Emergency service 4. Growth monitoring 5. Family planning service 6. Children Immunization 7. Antenatal Care 8. HIV counsling 9. Onchocerciasis 10. Other (specify)_____ 11. I don't know	
How much do you agree or disagree with the statement below?			
206	HEPs services are practical options to improve the health of you and your families.	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	
207	HEPs Services are practical options to improve the health of your community in general.	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	
208	Your household should have contact the HEWs On regular basis	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	
209	You recommend using this service to a friend or relative household.	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	
210	Do you know mode of service delivery that you or other members of the household will be able to get service from HEWs?	1=Yes 2= No →	300
211	If yes, Can You mention some?	1= Home visit by HEWs → 2= In health post → 3= Other (specify) _____	212 213
212	How much do you agree or disagree with the statement below? The service being delivered through house-to-house by HEWs.	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	
213	How much do you agree or disagree with the statement below? The Health extension service being delivered in your Kebele?	1=Strongly disagree 2= disagree 3= Uncertain 4=agree 5=Strongly agree	

PART IV : HEPs Coverage and Utilization Questions			
NO.	QUESTIONS	CODING CLASSIFICATION	Skip to
300	Have you or any member of your household any service-related contact with HEWs in the previous 6 months?	1=Yes 2= No	
301	If the answer for Q 300 is, yes, how many times you did or any member of your household had any service-related contact with HEWSs in the previous 6 months?	1=_____	
302	If the answer for Q 300 is yes when was the last time that the contact has been done?	1 = Less than one month ago 2 = Two months ago 3 = Three months ago 4= More than three months ago 5= More than four months ago 6= More than five months ago	
303	How much satisfied are you with your frequency of contact with HEWs	1. Not satisfied at all 2. Not very satisfied 3. Neither satisfied nor dissatisfied 4. Satisfied 5. Very satisfied	
304	If the answer for Q 300 is, yes, where was the contact been done?	1= at home → 2= at health post/kebele → 3= at community meetings → 4= at religious institutions → 5=at cultural institutions → 6=at farm place → 7=at school → 8=other places (specify)	305 317-319 320-326 328-333 328-333 328-333 328-333
305	The answer for Q 304 is 1, how the home contact was made?	1= home visit by the HEWs → 2= HEWs called to home → 3= others(specify)	306-313 314-316
306	If the answer for Q 305 is 1, how many times did the HEWs visited your house in the last six months?	1=_____	
307	If the answer for Q 405 is one When was the last time that health extension workers visited your home?	1 = Less than one month ago 2 = Two months ago 3 = Three months ago 4= More than three months ago 5= More than four months ago 6= More than five months ago	
308	When the health extension workers visited your home, what did they do? (more than one answers accepted)	1 = Give health education → 2 = Helped care for sick person 3 = Administered first aid 4= Give family planning 5 = Helped sick baby and baby mother 6 = Give HIV/AIDS counseling	309

		7= Give growth monitoring service. 8= Attend precipitated labor 9= select latrine construction site 10=select waste pit construction site 11=supervision of sanitation facility 12=Demonstration of food hygiene activities 13=Mobilization for Immunization 14= Facilitating LLNs utilization 15=Others (specify)	
309	What specific health education information did you received from health extension worker? (more than one answers accepted)	1 = Immunization 2 = nutrition 3 = food hygiene safety measure 4 = Pregnancy care/delivery plan 5 = HIV/AIDS 6= TB/ leprosy 7= Malaria prevention 8 = Waste management 9 = Latrine construction and utilization 10 = water supply and safety measures 11= Family planning 12= Adolescent reproductive health 13=Onchocherchiasis 14=Harm full traditional practice 15=Healthy home environment 16= Insects and rodents control 17= personal Hygiene 18=hand washing facility near to latrine 19=Others (specify)	
310	Do you ask question or any assistant related to health you need during their visits?	1 = Yes 2 = No	
311	Were the HEWs easy to understand During her visits?	1. Yes 2 .No	
312	How satisfied are you with your household interaction with HEWs?	1. Not satisfied at all 2. Not very satisfied 3. Neither satisfied nor dissatisfied 4. Satisfied 5. Very satisfied	
313	How help full was the service to t you and your family?	1=not useful atoll 2=not very Useful 3=Uncertain	

		4= useful 5=very useful	
314	If the answer for Q 305 is two what is the most important reason for calling a visit from the HEWs?	1. a member of the family was sick 2. for family planning 3. for deliveries and related 4. for first aid/emergency service 5. other reason(specify):_____	
315	How satisfied are you with your Family interaction with HEWs?	1. Not satisfied at all 2. Not very satisfied 3. Neither satisfied nor dissatisfied 4. Satisfied 5. Very satisfied	
316	How help full was the service to you and your family?	1=not useful at all 2=not very Useful 3=Uncertain 4= useful5=very useful	
317	If the answer for Q 304 is two What is the most important reason for visiting HEPs? more than one answer is accepted	1. member of the family was sick 2. for consultation on general health 3. growth monitoring 4. adolescent reproductive Health services 5. Went for family planning 6. For ANC 7. HIV counselling 8. To get TB drugs (DOT service) 9. firs aid & emergency service 10. Other reason(specify):_____	
318	Have you get the service you need during the visit?	1. Yes 2. No	
319	If the answer for Q 318 is, yes how much are you satisfied with the service you received?	1. Not satisfied at all 2. Not very satisfied 3. Neither satisfied nor dissatisfied 4. Satisfied 5. Very satisfied	
320	During the visits to the health post, were the HEWs easy to understand?	1. Yes 2. No	
321	If the answer for Q 303 is three, Did the community meeting have been organized by the HEWs?	1. Yes 2. No 3. don't know	
322	Did the health extension workers give health education on the community meeting?	1. Yes 2. No →	327

323	If the answer for Q 322 is yes, What specific health education information did you received from HEWs? (read out the answers) (more than one answers accepted)	1. Immunization 2. Family planning 3. food hygiene and safety measures 4. Pregnancy care/delivery plan HIV/AIDS 5. TB/ leprosy 6. Malaria prevention 7. Waste management 8. Latrine construction and utilization 9. Water supply and safety measures 10. Adolescent reproductive health 11. Onchocherciasis 12. Harmful traditional practice 13. Healthy home and environmental sanitation 14. personal hygiene 15. insects and rodents control	
324	How satisfied are you with your house hold interaction with HEWs	1. Not satisfied at all 2. Not very satisfied 3. Neither satisfied nor dissatisfied 4. Satisfied 5. Very satisfied	
325	During the meeting was the HEP easy to understand?	1 = Yes 2 = No	
326	Do you ask education or any assistant related to health you need during the community meeting?	1 = Yes ,we got what I asked for 2= yes ,but we didn't got what we asked 3 = No	
327	If the answer for Q 303 is 4,5,6,7, Did the health extension workers give health education?	1 = yes 2 = No ⟶	333
329	What specific health education information did you received from HEWs? (read out the answers) (more than one answers accepted)	1 = Immunization 2 = Nutrition 3 = Food safety management 4 = Pregnancy care/delivery plan 5 = HIV/AIDS 6= TB/ leprosy 7= Malaria prevention 8 = Waste management 9 = Latrine construction utilization 10 = Safe / clean water 11= Family planning 12= Adolescent reproductive health 13= Onchocherciasis control 14= Harmful traditional practice 15= Housing and environmental sanitation 16=others (specify)_____	

330	How satisfied are you with your house hold interaction with HEWs	1= not satisfied at all 2= Not very satisfied 3= Neither satisfied nor dissatisfied 4= Satisfied 5= Very Satisfied	
332	How help full was the service to you and your family?	1. not useful at all 2. not very Useful 3. Uncertain 4. useful 5. very useful	
333	During the contact were the HEWs easy to understand?	1 = Yes 2 = No	
333	Do you ask education or any assistant related to health you need during the contact?	1 = Yes ,we got what I asked for 2=yes, but we didn't get what we asked? 3 = No	
334	Have you heard about a model family?	1 = yes 2 = No ⟶	339
335	If yes, from where did you hear about model family?	1 = From HEWs 2 = From community health workers 3 = From member of my community 4 = From friend or relative 5 = From radio 6 = from other source (specify)	
336	Has your family participated in a model family training?	1 = yes 2 = No ⟶	438
337	If yes, did your family finish the model family training & got certificate?	1 = yes, and showed certificate 2 = yes, did not show certificate 3 = Presently in training 4 = Did not finish the training, drop out	
338	In what year was the certificate issued? Write the month and year?	1st=Month.____Year.___/___/___/E.C 2nd= Month.____Year.____/__/___/E.C	
339	Have your family been asked to participate in model family training?	1=Yes but never interested to participate 2=Yes but we have no time for the training 2 = No	
340	Are there services that you have needed but have been unable to find from Health Extension Service?	1. Yes 2. No ⟶	441
341	Can you mention what services those were?	1. _____ 2. _____ 3. _____	

Community Health Workers			
342	Have you heard about volunteer community health workers?	1 = yes 2 = No →	401
343	From where did you hear about volunteer community health workers?	1 = from health extension worker 2 = from volunteer community health worker 3 = from community members 4= from relative or friend 5= from radio or television 6=others (specify)	
344	Have any community health workers visited your home in the last three months?	1 = yes 2 = No →	401
345	What kind of information did the community health worker provide when she/he visited your home?(read out the answers) (More than one answer is acceptable)	1. Immunization 2. Nutrition 3. Food safety management 4. Pregnancy care/delivery plan 5. HIV/AIDS 6. TB/ leprosy 7. Malaria prevention 8. Waste management 9. Latrine construction & utilization 10. Water supply and safety measures 11. Family planning 12. Adolescent reproductive health 13. Onchocherciasis 14. Harmful traditional practice 15. Housing and environmental sanitation 16. others (specify)	

PART V : Satisfaction With HEPs			
NO.	QUESTIONS	CODING CLASSIFICATION	Skip to
401	How satisfied are you with communication ability of HEWs?	1. Not satisfied at all 2. Not very Satisfied 3.either satisfied nor dissatisfied 4. satisfied 5. very satisfied	
402	How satisfied are you in the usefulness of the service you received from HEWSs?	**1.** Not satisfied at all **2.** Not very Satisfied **3.** Neither satisfied nor dissatisfied 4. satisfied 5. very satisfied	
How much do you agree or disagree with the statement below?			
403	During your contacts did the HEWs; has good competence as a health worker?	1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree	
404	During the contacts it was easy to understand what the HEWS teach or advice?	1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree	
405	The HEWSs respect my family and me during the contact.	1. Strongly disagree 2. Disagree 3. Uncertain 4. Agree 5. Strongly agree	
406	The HEWs are with no discrimination to all community members during service delivery. .	1. Strongly disagree 2. Disagree3. Uncertain 4. Agree 5. Strongly agree	
407	HEWs were always available when needed	1.strongly disagree 2.disagree 3.neutral 4 agree 5 strongly agree	

III. ORAL CONSENT FORM FOR FOCUS GROUPS

Name of the study: utilization of health extension service

Investigator: Tamirat Alemu

You are kindly requested to take part in a group discussion facilitated by me and my friend; we will have several other similar sessions like this and in-depth interviews. The groups will talk about health extension service and factors affecting the service. The findings will primarily help for the improvement of program inform policy-and decision-makers hence, your involvement is highly valuable.

If you are interested to take part in the research, the session was expected to last $1_{1/2}$ to 2 hours. Your participation is voluntary and there is no penalty for refusing to take part. You may also withdraw from the group at any time.

This discussion will give you an opportunity to share your views and learn from the discussion. We think others can learn a lot from your experiences and the findings was used to help people. The groups was tape-recorded with voices only. The audiotape is only to help us remember what was said. They was kept absolutely confidential and was destroyed after sometime. The note-taker will write down the opinions of the group during the sessions. We will not record your name or any other personal things about you during the groups. We strongly urge participants not to reveal outside the group information they may have heard during the session.

We will protect information about you and you're taking part in this research to the best of our ability. If the results of this research are published, your name will not be shown.

I have reviewed the fact sheet with the research participants, and they have fully agreed to be in this focus group research. I further agree to keep confidential anything that is said in the group discussion.

Name of the Moderator) _____

Signature_____

Date_____/_____/2013

IV. Topic guide Focus group discussion English version.

A. For Health Extension Workers

1. Can you explain what it are like to be health extension workers? What is your work like?
2. How do you select homes to visit? Is there disadvantaged groups specifically targeted by your program?
3. What determines how many households you will see?
4. What are the programs areas mostly utilized by the community? Why?
5. What do you think the community thinks of your work? Are there any people who refuse to use your service? Which program?
6. What does the community expect from you?
7. Do you think that you can satisfy the expectations of the community if yes How? If no why?
8. Can anyone tell us the thing she like the most about her work as a HEWSs?
9. What Part of program don't you like about your work?
10. What are some of the main problems that you face in your work?
11. Can you think of any solutions for these problems?
12. Do you have anything else to suggest or comment on it?

B. For women lead health development army leaders (mothers)

1. How do you see the start of implementation of the program in the kebele?
2. What are the potential use and challenge of the program?
3. Can anyone tell me the thing you like best about the work of HEWs?
4. How do you see the current acceptability and service uptake by the members of the community?
5. How do you see Community acceptability about the service and the HEWs?
6. What determines the community acceptability and uptake of the service availed through HEWs?
7. How do you see the program impact on your community? What kind? How do you know?
8. What suggestions do you have for the further implementation of the program?
9. Do you have anything else to suggest or comment on?

V. ORAL CONSENT FORM FOR IN-DEPTH INTERVIEWS

Name of the study: **Utilization of health extension service**

Investigator: - **Tamirat Alemu**

This interview is conducted to gather detailed information on health extension service. We are asking people whom we believe have knowledge about the issue under study. The findings will inform planers policy-and decision-makers and, help to the improvement of program hence, your involvement is very important. It will take most people up to one hour to answer the questions. The names of people who agree to be interviewed will not be recorded without their permission. But the information you give will not be linked to your name or identity so that no one else knows whether you participated in the research or not. Your participation is voluntary and there is no penalty for refusing to take part. You may refuse to answer any question in the interview or stop the interview at any time you want.

Are you interested to take part of the study?

I further agree to keep confidential everything said by the interviewee.

Signature _____

(Date)_____/_____/2013

VI. Topic Guide for key informants

A. For Woreda health office head.

1. Data collector' name _____ 2. Date of interview: _____ / _____./2013 3. Time start: __/__:__/___: Time end __/___:__/___		
General about the program implementation	How the health extension program is being implemented in your woreda? What component of the package is performing better and which is performing less? What are the enablers for better performance and disablers for less performance? How can these disablers be removed to improve performance of all components of the program?	
Support to health extension workers	How does the health office support the health extension workers to undertake their duties? What activities do you undertake with the health extension workers?	
Monitoring	Who is responsible for monitoring the health extension workers? How is monitoring done? What are monitored? What do you do with information gathered from the monitoring?	
Supply chain	Are the needed supplies available to the health extension s workers? How does the health post get drugs and supplies to work? What roles does the health office play in getting supplies for health post?	
Collaboration across different sectors	Is there collaboration across different sectors in the program implementation? What are the other sectors that are involved in the program? What are their levels of involvement and what role do they play?	
Community participation and acceptance	What provider issues have been obstacles in meeting community need? What user issues have been obstacles in meeting the program objective? How do you evaluate the uptake of the service by the community? How are people responding?	
HEW delivery and use overall assessment	Success What determines the success Challenges What is the solution	

B. for Health Extension program Supervisors

1. Health Centre Code: ___ /___ 2. .Data collector' name _____ 3. Date of interview: _____ / ____/2013 4. Time start: __/__:__/___: Time end __/___:__/_	
Service delivery	Is the full (16) package of the health extension program being delivered in your supervision areas? What do you think are the enablers for better performance? What are disabling factors for less performance? How can these disablers be removed to improve performance of all components of the program? Are there any obstacles that have prevented HEW's from serving clients and implementing the program according to the national guidelines
Community participation and acceptance	What provider issues have been obstacles in meeting community need? What user issues have been obstacles in meeting the program objective? How do you evaluate the uptake of the service by the community? How are people responding?
Monitoring	How is monitoring done? What are monitored? Have you a standardized monitoring tool? How are Data/ reports received from health post managed, processed and used?
Supply chain	Do the health extension workers have the supplies and equipment they need to provide the Services they are expected to deliver? How does the supply chain work? How do you get more supplies? How often do you get them? What form(s) do you use? What roles do the woreda, health post and kebele health council play in the supply chain system?
Collaboration across different sectors	What are the other sectors that are collaborating with you in the health extension program? What are their levels of involvement and what role do they play?
Health Extension service overall assessment	The Success What determines the success The Challenges What is the solution

VII. General Assessment For functionality and support to Health Extension program

Health post name_____
Data collector' name _____
Date of interview: _____ /_____/2013Time start: __/__:__/___: Time end __/___:__/__

Which of the following services do you provide at this Health post? (write yes if the service is provided or no , if not

NO.	List of recommended service	Service currently available yes/no	Places where the service is being given (circle)	Type of service provided (choose from the list more than one answer possible)	Total number of beneficiaries in the last 1 year/ total target for the year
101	Family planning service?		1. Health post 2. Families and Household 3. Schools	1=OCP 2=Condom 3=Depo-Provera 4=Other(specify)	
102	HIV/AIDS and STI related Services		1=Health post 2=Families and Household 3=Schools	1. Information on VCT 2. Promoting PMTCT 3. Promotion of ABC	
103	ANC Services		1=Health post 2=Families and Household		
104	Emergency service		1=Health post 2=Families and Household	1.Attend precipitated deliveries 2. Manage and clean minor wounds3. Fever management in under five4. Manage bleeding and allergy	

105	adolescent reproductive health services		1=Health post 2=Families and Household 3=Schools	1. Health education on HIV/AIDS 2. Health education HTP 3. condom provision referring for HIV/AIDS testing 4. Other(specify)_____	
106	Routine screening for malnutrition and early signs of disease in under five children?		1=Health post 2=Families and Household		
107	routine Screening for malnutrition in Pregnant and lactating women		1=Health post 2=Families and Household		
108	Solid and liquid waste management		1=Health post 2=Families and Household 3=Schools=FTC		
109	Personal hygiene and housing		1=Health post 2=Families and Household 3=school 3= FTC		
110	Food and water hygiene		1=Health post 2=Families and Household 3=Schools 4=FTC		
111	Latrine construction, and utilization		1=Health post 2=Families and Household 3=Schools 4= FTC		

112	Malaria prevention and control		1=Health post 2=Families and Household	1.=ITN distribution 2=Rapid diagnosis and treatment 3=health education 4=Environmental management	
113	TB and leprosy prevention and control		1=Health post 2=Families and Household 3=Schools 4=FTC	1=case detection 2=DOT service 3=Defaulter tracing 4=health education	
114	Onchocherciacis control		1=Health post 2=Families and Household 3=Schools 4=FTC	1=Health Education 2=CDD training 3=community supervisors training	
115	Latrine construction and utilization		1=Health post 2=Families and Household 3=Schools		
116	Model family training		1=Health post 2=Families and Household 3=Schools 4=FTC		

VIII. Supply and logistics

No	Type of supply	Currently available (yes/No)	3 month stock out	Cumulative period of stock out in the last 3 month	Possible reason
201	OCP				
202	Condom				
203	Depo-Provera				
204	AD Syringe and needle				
205	Disposable Syringe and needle				
206	Rapid test kits for malaria				
207	ORS				
208	ASA				
209	Paracetamol				
210	Iron sulphate				
211	MUAC strips				
212	Ergometricmaleattles				
213	Oxytocin				
214	Adrenaline				
215	GV				
216	Alcohol				
217	Bandage				
218	Savilon				
219	Disposable examination glove				
222	Disposable surgical gloves				
220	Registration book				

221	Reporting format				

IX. Medical Equipment and other resource organization

No	List of equipment	Currently available	Currently functional this week
301	Sphygmomanometer		
302	Sthestescope		
303	Thermometer		
304	Infant scale		
305	Adult weighting scale		
306	Hand reflector/torch		
307	Stature		
308	Fetoscope		
309	Tape measure		
310	Examination bed		
311	Refrigerator or cold box		
312	Health post with three rooms conducive for the service?		
313	Furniture for HEWSs Two Chair		
314	Table		
315	Shelf for documentation		
315	Chair for clients in the health post		

X. Support system

S.No	Question	Code classification	Go to
401	Is there a kebele health committee in your Keble?	1=Yes 2= No ⟶	403
402	How do you rate the health committee involvement in the program ?	1=very good 2=good 3= medium 4=poor 5=very poor	
403	How do you rate the kebele administration support in your kebele	1=very good 2=good 3= medium 4=poor 5=very poor	
404	How frequent you been supervised by your supervisor?	1=_____	
405	Did your supervisor use a supervisory checklist during his visit?	1=Yes 2= No	
406	What does your supervisor usually do when he/she visits you?	**1.** Observation of service delivery **2.** Coaching and skills development **3.** Trouble shooting, problem solving **4.** Record Review **5.** Supply check 6. Others(specify)_____	
407	How often you been supervised by supervisory team from the health centre	1. _____	

408	Have you been supervised by supervisory from the health centre in the last 3 months?	1. Yes 2. No	
409	How often you been supervised by a supervisor team from woreda health office?	1. _____	
410	Have you been supervised by a supervisor team from woreda health office in the past 6 month?	1. Yes 2. No	
411	Are implementation guidelines for all the 16 packages available?	1. Yes 2. No	
412	If no how many packages are available?	1. _____	
413	Did you or any of your colleagues in your kebele have had additional training receive? (refresher/ongoing training in the last 1 year)	1. Yes, refresher 2. Yes, ongoing training 3. No	
414	On what specific topic did refresher/ongoing training was about?	1. _____ __	
415	Do you have VHWs in your kebele	1. Yes 2. No →	
417	If yes how many are they	1. _____	
418	Have you conducted base line survey in your kebele?	1. Yes 2. No	
419	If yes when was the last time it was revised?	1._____	

Afan Oromo Version Questionnaire

Gaafanno Qoranno Hala abbaa Warraa AanaaLaaloo Qilee Fulbaana 2006

Kutaa I Haala hawaasumaa,dinagdee fi facaatii ummataa			
T.L	Gaaffii	Koodii ykn Mogaasaa	Gara Gaaffi darbii
001	Gaheen Maatii kessatii qabdan maalii?	1= abbaa warraa 2= hadha waraa 3= firraa abbaa warraa ykn hadha warraa	
002	Umurii namaa gaaffii kana deebisee (iddoo duwwaa jirutii barreessii)	1 =_____	
003	Haalii Gaa'ila keessanii akkam?	1=kophaa kan jiraatuu 2=kan fudhee/kan herumtee 3=kan adda bahaani jiraatu/ttu 4=seraan kan wal hikanii jiran 5=abbaamanaa ykn haaatii manaa kan jalaa du'e/tte	
004	Amanttin keessan?	6= proteestaantii 7= Ortoodiiksii 8= musliima 9= kaatoolika 10= kan biraa (adda baasii) _____	
005	Saba?	1= Oromoo 2= Amaraa 3= Tigre 4= Guraagee 5= Ksn biraa (adda baasii)_____	
006	Sadarkaa barnootaa nama gaafanoo debisaa jiru	1= kan hin baranee 2= oso hin baratiin baresuuf dubisuu kan danda'u/suu 3= kan baratan yoo ta'e sadarkaa isa guddaa caqasaa _____	
007	baay'ina miseensoota maatii umrii dhaan	1= waggaa 5 fi isaa gadii dhira_____dhalaa____ 2= waggaa6-15 =dhira_____dhalaa____ 3= waggaa 16-49 =dhira_____dhalaa____ 4= waggaa50-60=dhira_____dhalaa_____ 5= waggaa60fisaaol=_____ baay'inamaatiiwali galaadhira_____ dhalaa_____ waligala_____	
008	Sadarkaa barumsaa isaa guddaa matii keessatii jiruu	1= kan hin baranee 2= oso hin baratiin baresuuf dubisuu kan danda'u/suu 3= kan baratan yoo jiraatee sadarkaa isa guddaa caqasaa _____	
009	Haala hojii miseensoota maatii Kan armaan gadii kessaa filadhaa	Miseensoota maatii 1=Gaggeessa maatii _____	

	1. Qonnaan Bulaa 2. Haadha warraa 3. daldalaa 4. Qacaramaa Mottummaa 5. Kan ofin hoji ummatee hojatuu 6. Dhaabbata dhunfaa/Dhabbata mit motumaa 7. Dafqaan bulaa 8. Barataa 9. Kan biraa _____-	2=spouse (if the household is male headed) _____	
010	Galii maatii waligalaa kalatti hundaatiin argamuu qarshii dhaan	1 =_____	
011	Baasii maatii waligalaa qarshii dhaan (kan nyaataa Ufataa fi k.k.f	1 =_____	
012	Halaa manaa?	4. Kan dhunfaa 5. Kan kireefamee 6. Kan biraa	
013	Mani fincaanii miseensootni maatii itti fayyadamaa jiran?	1= kan dhunfaa 2=kan walinii 3= kan Ummataa 4= mana fincaanii hin qaban → 5= kan biraa _____	019
014	Maatii kessan alattii mana fincaanii akka ijaratani qaamni degarsa ykn gorsa issin godhee jira?	1= eyyee 2= Miti →	016
015	Yoo gaaffii 014 Eyye yoo ta'e qaamni deegarsa ykn gorsa isiinif godhe kami?	1= hojatoota Ekisteenshini fayyaa 2= Fedhiin hojatoota hawaasaa 3= abboti warraa fakki ta"an / gaggeessitoota Rayyaa misoomaa 4= kan birroo_____	
016	Maatiin kun naannoo man fincaanitii iddo harka dhiqanaa qabaa?	1=Eyyee 2=Mitii →	019
017	Gorsa ykn degarsi maatii kesan alatii akka ido harka dhiqanaa qopheefatan isiinf kenamee jira?	1=Eyyee 2=mitii →	019
018	Yoo deebiin G 017 eyyee, ta'e degarsii ykn gorsii argame ess argamee ?	1=Hojatoota Ekisteenshiinii fayyaaa 2=Fedhiin hojatoota fayyaa hawaasaa 3=Abbaa waraa fakkii ykn families / gaggeesitoota raayyaa misoomaa 4= kan biro	
019	Tooftaan ykn malii kosii dhangal'a ittin maqsiitan ?	1= Bolla kosii dhangala'a 2= Mana Fincaanii 3= Bakkeetii /iddoo argameetii dhangalaasuu	
020	Yoo deebii G 019 3 ta'e ,degarsa ykn gorsii issin qaama kan birraa irraa akkaataa kosiin dhangala'an maqfamuu	1=Eyyee 2=Miti →	023

	argatan jira ?		
021	Yoo deebin Gaaffii 019 eyyee ta'e degarsii ykn gorsi isin argatan essaayii ?	1=Hojatoota Ekisteenshiinii fayyaaa 2=Fedhiin hojatoota fayyaa hawaasaa 3=Abbotiii warraa fakki ta'an ykn gaggesiitiota rayyyaa misoomaa 4= kan birroo _____	
022	Toftaan ykn mallii kosii goggaa maqsuu fayyadamtan isaa kamii ?	5= Bolla kosii 6= Abidaa gubuu 7= karaaratii gatuu 8= kan biraaa_____	

Kutaa 2 ffaa : Itti fayyadama tajaajila fayyaa wali gala			
NO.	QUESTIONS	Akkaataa moogaafamaaa	Gara gaaffii
101	Ji'otan darban 6 kessatii miseensii maatii mana kanaa kamiyuu tajaajila fayyaa dhaabata fayyaa kamiyuu keessatii argateera?	1=EYYEE 2 =Miti →	104
102	Yoo deebiin G 101 eyyee ta'ee Tajaajila fayyaa gosa kamiif dhaabata fayyaa fayyadamtan? (Filanoo jiruutii marii) 7= Kalatii dhaan gara bufata fayyaan deemee 8= Hospiitaala motummaan kallatiin deemee 9= Klinika dhuunfaatii/ 10= Mana qorichaa baadiyaa 11= Namootaa addaa dhaan yaalii godhan 12= Kan biraa_____	10= Ijooleee dhukkubsateee yaalsiisuuf ? 11= Nama dhukkubsatee yaaluu// tajaajila wal'ansaduraa nama guddaa maatii kessa jiraatuu? 12= Mareee fayyaa waligalaatiif ? 13= Talaallii /hordofii guddina ijoolee ? 14= Tajaajila karoora maatii? 15= Tajaajila D/duraa/ Dahumsaa fi dahumsa bodaa ? 16= Kan biraa_____	
103	Tajaajila argatan kamifuu Hojatootni Ekisteenshiini fayyaa issinif waraqaa olerginsaa issiniif kenneniruu?	1=Eyyee 2 = Mitii	
104	Akkuma waligalaatii halii fayyaa maatii keessanii fi kessan maal fakkaata ?	6= Baay'e gaarii dha 7= Gaarii Dha 8= Haala Sirrii irra jira 9= Gadhee dha 10= baay'ee Gadhee	

Kutaaa 3ffaa : Gaafannoo Beekumsaa fi Ilaalchhaa ummataaf qophaa'ee			
NO.	Gaaffii	CODING CLASSIFICATION	Gara

			gaaffii
201	Waa'ee Hojatoota ekisteenshiinii fayyaa dhageesanii bektuu ?	1 = eyyee 2 = Miti	
202	Yoo deebiin gaffii 201 eyyee, waa'e hojatoota ekisteenshini fayyaa essaa dhageessan ?	1 = HEF irraaa 2 = FHFH irraa 3 = RAadiyoo ykn teeleviiziiniiraa 4 = Firra ykn hirriyyaa irraa 5 = Miseensoota hawwaasaa kan birroo irraa	
203	Waa'ee HEF ganda kan keessatii raammadamanii jiran beektuu ?	1=eyyee 2= mitii →	205
204	Isiinis ta'e maatiin kessan wa'e sagantaa ekisteenshiinii fayyaa ganda kessaniitii hojira olaa jiruu akkamitii ilaaltu ?	1=Baay'en degara 2=nidegara 3=hin degarus hin morminus 4=hin degaruu 5=baay'e mormina	
205	Tajaajila fayyaa isa kamin kara HEF tiin kennemu argatanii ?	1= Gorsa fayyaa fi fayyaan walqabatuu 2= Odeefanoo fi gorsa yeeroo dhukkubbii 3= Tajaajila walaansa duraa 4= Tajaajila hordoofii guddina ijoolee 5= Tajaajila karoora maatii 6= Tajaajila dahumsa duraa ,dahumsaa fi dhaumsa boodaa 7= Tajaajila gorsa Dhukkuba HIV/AIDsi 10=Kan biraa 11= Hin beekku	
Jechoota armaan gadiitii hagam itti amantuu ?			
206	Sagantaaleen ekisteenshini fayyaa filanoo qabatamaa rakko fayyaa kessaniis ta'e kan maatii keessani ta'usaa .	1=baay'ee waaligalaa 2=nan amanaa 3= hin beekuu 4=hin amanuu 5= Gonkumaa hin amnuu	
207	Sagantaaleen paakeejii ekisteenshiinii fayyaa sagantaa rakko ummata qabatamaatii hikuu danda'u dha	1=baay'een wali gala 2=walin gala 3=hin beekamu 4=wali hin galu e 5= Gonkumaayuu wa galuu hin danda'u	
208	Hojatoota Ekisteenshiinii fayyaa waliin sagantaa dhaan wal arguu qabduu	1=Baay'een wali gala 2=walin gala 3= kan jechuu hin danda'u 4=wali hin galuu 5=Gonkumaa wali galuu hindanda'u	
209	Fira keessa ykn hiriyaan keeessan akka sagantaalee paakejii ekistenshiinii fayytii fayyadaman nigorsituu	1=Bayyeen walii gala 2=wali gala 3=kan jechuu hin danda'u 4=wali hingalu 5=Gonkumaa wali hin galu	
210	Akkataa ?sirna tajaajilii paakeejii Ekisteenshiinii fayya itti kennamuu bektuu	1=Eyyee 2= Mitii →	300
211	Yoo deebiin keessan gaaffii 210 eyyee, ta'e tooftaalee jiran caqasuu dandeesuu caqasuu dandeesuu?	4= Daawwanaa mana manaa HEF → 5= Kellaa fayyaatii /Gandatii → 6= Kan biraan yoo jiraatee ibsaa_____	212 213
212	Jechoota armaan gadii hangam amantuu ykn mormiituu ? Tajaajila fayyaa HEFtiin manaa manatii kennamuu	1=Baay'e itti ammanan 2=Itiin amanan 3= Kan jechuu hin danda'u 4= hin ammanuu 5=Gonkuumayuu hin fudhadhuu	
213	Jechoota armaan gadii hangam amantuu ykn mormiituu ? Tajaajila sagantaa Paakeejii Ekisteenshiini Fayyaa	1=Baay'een wali gala 2= nan amana 3= kan jechuu huin danda'u 4=hin ffudhadhuu 5=gonkumaayuu hin fudhedhuu	

	Sadarkaa Kellaa fayyaatii kennemuu .		

Kutaa 4 ffaa : Haguggii fi itti fayyadama HEF(Hojatoota Ekisteenshiinii fayyaa)

T.Lk.	Gaaffii	Qodinsa koodii /mogaasaa	Gara gaaffii
300	Isiiniis ta'e miseensii maatii keessanii tajaajila fayyaa HEF walin wal qabatuu ji'otan jahaan darban keessa argatanii bektuuu?	1=Eyyee 2= mitii	
301	Yoo deebiin gaaffii 300, eyyee, ta'ee isiiniis ta'ee namnii tajaajila argatee ji'otan jahaan darban keessa si'a meeqa HEF walin wal argiitan_____	1=	
302	Yoo deebiin gaaffii 300 eyyee ta'e , Yeeroo Xummuraaf kan HEF walin wal argiitan yoom ?	1 = Ji'a tokko gadiitii 2 = Ji'a lamaan dura 3 = ji'a sadiin dura 4= ji'a sadii caaleera 5= ji'a afur caaleera 6= ji'a shan caaleera	
303	Baayina wal argiitaniiti hanfgam itti gammadanirtuu	1= Baa'ee ittii gamaneeraa 2= Itti gamaneeraa 3= Ittis gamaderaas ittis hin gamanee 4= Baay'ee ittti hin gamadnee 5= Walumaa galatii itti hin gamadnee	
304	Yoo gaaffii 300 , eyyee, waliitii dhufeenyii isiin HEF wali qabdan essatii turee ?	5= manatii → 6= kellaa fayyaatii/gandatii → 7= iddoo wal gahiitii → 8= waldaalee amantiitii → 9= dhaabilee hawaasumaatii → 10= iddoo hojjii → 11= mana barumsaatii → 12= Kan biro _____	305 317- 319 320-326 328-333 328-333 328-333 328-333
305	Yoo deebiin gaaffii 304 tokko ta'e akkamitii manatii war arguu dandeessan?	1= daawwanaa manaa manaa HEF → 2= suparvaayizara HEFtu man dhufee → 3= kan biro_____	306-313 314-316
306	Yoo deebiin gaaffii 305 1 ta'e ji'ottan jahaa darban keessatii HEF si'a meeqa mana keessan daawwatee?,_____	1=	
307	Yoo Deebiin Gaaffii 305 1 ta'ee yeeroo Xuummuraaf yoom kan HEF man keessan daawwatee ?	1 = Ji'a 1 dura 2 = Ji'a lamma dura 3 = ji'a sadii dura 4= Ji'a sadii caaleeraa 5= Ji'a afur caaleeraa 6= Ji'a shan caaleeraa	
308	Yeeroo HEF mana Keessan Daawwattuu Wantii isheen hojjatuu maal fa'i? Deebiiwwan jiran dubbisiif , deebiin tokko ol fudhatama niqaba	1 = Baruumsa fayyaa kennu → 2 = nama dhukkubsateef deegarsa kennu 3 = tajaajila wal'ansa duraa kennu 4= tajaajila karoora maatii kennu 5 = degarsa ijoolee dhukkubsatuu fi hadha mucaatiif kennu 6 = Tajaajila Ittisaaf To'anoo Dhukkuba HIV/AIDsi 7= Tajaajila Hordoofii Guddinaa Daa'immani	309

		8= Tajaajila Dahumsa boodaa 9= kan biraa (----------)	
309	Baruumsii fayyaa fi odeefannoon isin argatan maal maal irrattii (deebiin tokko ol fudhatama niqaba)	1 = Talaallii 2 = Sirna nyaataa 3 = Haala qabbinsaa fi qullqullina nyaataa 4 = Karooraa dahumsaa fi dahumsa walin wal qabatee 5 = HIV/AIDS 6= Dhukkuba Darranyoo sombaa 7= Ittisaaf To'anno dhukkuba Busaa 8 = Qabinsaa fi mawqsuu kosii 9 = Ijaarsaafi itti fayyadama mana fincaannii 10 = Dhiiheesii bishaanii fi qulqulina bishaani 11= karoora maatii 12= fayyaa wal hormaata dargaggoo 15= mana jiraanyaa fayyaa namaatiif mijaawaa ta'ee. 16=kan biroo	
310	Yeroo Hojjatuun Ekisteenshiinii fayyaan isin bira dhuftuu waa'ee fayyaa keessanii walin wal qabatee deegarsii isin gaafattan jira ?	1 = Eyyee 2 = mitii	
311	Yeroo daawwanaa HEF Hojatuun Ekisteenshini fayyaa walin salpaatii walii galuu dandeesuu?	1 = Eyyee 2 = Mitii	
312	How itti qufeera are you with your household interaction with HEWSs? Walitii dhufeenyii maatii keesanifi Hojatoota Ekisteenshinii fayyaa Hangam isin gammachisee ?	1= Baay'en itti gammada 2= Itti gammadeera 3= Ittis hin gammadnee hin gaddinees 4= Baay'ee itti hin gammadnee 5= Walumaa galatii itti hin gammadnee	
313	Tajaajiilii Sagantaa Ekisteenshiinii fayyaa kun hangam maatii keessaniis ta'e issin fayyada	1. Baay'ee faayiidaa qabeessaa 2. Faayiidaa qabeesal 3. Kan jeechuu hin danda'u 4. Baay'ee hin fayyaduu 5. Walumaa gala hin fayyaduu	
314	Yoo deeebiin gaaffii 305 lama ta'e sababiin issin hojatoota ekisteenshiinii fayyaa akka waamtan kan godhee maali ?	1= Haala fayyaa wali galaa marisiisuuf 2= Miseensa maatii kessaa tokko dhukkubsatee ture 3= Tajaajila hordoofii guddinaa ijooleetiif 4= Tajaajila karoora matii 5= Tajaajila dahumsaatiif 6= Waa'ee gorsa dhukkuba HIV/AIDsi 7= Tajaajila walaansa duraa 8= Kan biraa _____	
315	Walitii dhufeenya atiif ykn maatii kee fi HEF qabaniin	1= Baayeen itti quffee 2= Itti qufeera 3= Itti hin qufnes hin gaddinees	

	hangam itti qufteeta ?	4= Baay'ee itti hin qufnee 5= Walumaa gala itti hin qufnee	
316	Tajaajilii sagantaa Ekisteenshiinii fayyaa maatii keessan hangam gargaaraa jira ?	1= Baay'ee gargaara 2= Ni gargaara 3= Kana jechuu hin danda'u 4= Baay'ee hin gargaaruu 5= Walumaa gala hin gargaaruu	
317	Yoo deebiin gaaffii 304 lama ta'e sababnii baayee murteesaan akka HEF daawwatan godhee maalii ? (deebiin tokko ol fudhatama qaba)	1= Miseensoota maatii keessaa dhukkubsataniruu Mare fayyaa wali gala gochuuf 2= Hordoofii giddinaa ijoolee 3= Fayaa wal hormaata dargaggootaa 4= Tajaajila karoora maatii 5= Tajaajila dahumsa duraa 6= Gorsaa dhukkuba HIV?AIDsi kennu 7= Tajaajila walaansa duraa 8=Kan biraa_____	
318	Tajaajila barbaadan argatanituu?	1 = Eyyee 2 = mitii	
319	Yoo deebiin gaaffii 318 eyyee ta'e tajaajila argataniin hangam itti quftanituu?	1= Baay'een itti qufee 2= Itti qufeera 3= Itti qufnee hin gadinees 4= Baay'ee hin qufnee 5= Walumaagala itti hin qufnee	
320	Yeeroo kellaa fayyaa dhaqxan HEF salphaatii hubachuu dandeesuu	1 = Eyyee 2 = mitii	
321	Yoo deebiin gaaffii 303 sadii ta'e , wal gahiin ummataa karaa hojatoota ekisteenshiinii fayyaatiin qindaa'ee ?	1 = Eyyee 2 = mitii 3= hin bekuu	
322	HEF Wal -gahii irratii barumsaa fayyaa kennaniruu ?	1 = Eyyee 2 = mitii ⟶	327
323	Yoo deebiin gaaffii 322 eyyee, ta'e barumsii fayyaa kennamee mata duree maaliiratii ? (deebiiwwan jira dubiissiif) (debiin tokko ol fudhatama qaba)	1 = tallaallii 2= karoora maatii 1 Qulqullina nyaataa 4 = tajaajila dahumsa duraa/dahumsa /dahums Boodaa 5 = HIV/AIDS 6= ittisaaf to'anoo ddaranyoo sombaa 7= ittisaaf to'anoo busaa 8 = qabinsa kosii 9 = ijaarsaaf itti fayyadama mana fincaanii 10 = qulqullina bishaanii 12= fayyaa wal hormaata darggaggotaa 13= mana jireenyaa fayyaa namaatiif mija'e ta'e 14= qulqullina dhunfaa 17= ittisaaf to'anoo ilbisootaa	
324	Walitii dhufeenya maatiin kessaniif HEF walin qabdaniin hangam itti quftaniituu ?	6. Baay'ee itti gammadeera 7. gammadeera 8. ittis hin gamadnee hin gadinees	

		9. baay'ee itti hin gamanee 10. gonkumaayuu itti hin gamanee	
325	Tajaajilii kun maatii keessanif hangama fayyadeera jettani yaaduu?	1= Baay'ee fayyadeera 2= Hanga ta'e fayyadeera 3= Fayyaduu danda'a 4= baay'ee hin fayyaduu 5= Gonkumaayuu hin fayyadnee	
326	Yeeroo wal gahiin adeemsiifamee HEF waliin salphaatii wali galuu fi ishee hubachuu dandeessanituu ?	1 = Eyyee 2 = miti?	
327	Yeroo wal-gahii ummataa wa'ee barumsa fayyaa ilaalchisee gaafii ykn degarsii isiin gaaafatan jira?	1 = 1 = Eyyee ,waan gaafaness arganera 2=eyyee ,garuu waan gaafaneemoo hin arganee 3 = hin gaafanee	
328	Yoo debiin gaaffii 303 4/5/6/7, ta'e HEF barumsa kennaniru ?	1 = eyyee 2 = miti ⟶	333
329	Odefanoon barumsa fayyaa isii argatan ykn yeroo walgahii kennamee maalii ? (Deebiin tokko ol fudhatamaa dha)	1. = Talaalii 2 = sirna nyaataa (nutrition) 3 = qullqulinafi of eganoo nyaataa 4 = tajaajila dshumsaan walqabatuu 5 = HIV/AIDS 6= daranyoo sombaa fi qurchii 7= *ittisaaf to'anoo busaa* 8 = qabimsaafi maqa kosii 9 = ijaarsaaf itti fayyadama mana fincaanii 10 = waa'ee bishaan qulquluu 11= tajaajila karoora maatii 12= fayyaa wal hormaata dargaggootaa 13= mana jireenyaa fayyaa namaatiif mija'a ta'ee 14=ittisaaf to'annoo ilbisootaa fi qorxomsitootaa 15. qulqulina dhunfaa(personal hygiene)	
330	Barumsa kennameen hangam itti gamadeerta?	6= Baay'ee gamadeera 7= Itti gamadeera 8= Itti hingamanees itti hin gadinees 9= Baay'ee itti hin gamanee 10= Walumaagala itti hin gamanee	
332	Baruumsii kennamee matii kessan hangam fayyadeera jettani yaadduu?	1= Baay'ee fayyada 2= Hanga ta'e ni fayyada 3= Fayyaduu danda'a 4= Baay'ee hin fayyaduu 5= Gonkumaayuu hin fayyaduu	
333	Yeroo abruumsii kennamee akka salphaatii hubatameera?	1 = Eyyee 2 = miti	

333	Yeroo baruumsii kennamuu fgaafiin ykn ibsii isiin gaafatam jira ?	1 = Eyyee ,waan gaafameef deebiin kennemeera 2=eyyee ,gaafanuus deebiin hinkennemnee 3 = hin gaafanee	
334	Waa'ee abbaa warraa fakkii (moodeelaa) dhageessanii beektuu?	1 = eyyee 2 = miti ⟶	339
335	Yoo deebiin keessan eyyee, ta'ee waa'ee abbaa warraa fakki essaa dhageessani?	1 = HEF irraa 2 = hojatoota fayyaa hawaasaaraa 3 = miseensoota haawaasaaraa 4 = hiriyaa ykn firra 5 = raadiyoo ykn Teleleviziinii 6 = kan birroo	
336	Leenjii maatii adda duree keessatii matiin keessan leenjii hirmaatee beeka?	1 = eyyee 2 = miti ⟶	338
337	Yoo deebiin kessan eyyee, ta'e maatiin keessan leenjii xumuree waraqaa raga fudhateera?	1 = eyyee, fi ragaa ilaalamee 2 = eyyee, raga agarsisuu hin dandeenyee 3 = yeroo amaaleenji'a jiru 4 = leenjii osoo hin xumuriin kessan bahuu	
338	Yoo waraqaan raga jiraatee yoom kennamee ?	1=ji'a.____waggaa_ _/___/	
339	Maatiin keessan akka leenjii abbaa warraa adadureeratii hinmaatam gaafatamtanii beektuu ?	1=Eyyee garuu nutii hirmaachuf feedhii hin qabnuu ture 2=Eyyee garuu hirmaachuuf yeerooohin qabnuu ture 2 = hin gaafatamnee	
340	Tajaajiilii atii HEF irraa argachuuf barbaadan garuu kan HEF kenuu hin dandeenyee jira ?	1. Eyyee 2. hin jiru ⟶	341
341	Yoo deebiin keessan eyyee ta'e tajaajilootnii kun maal fa'I ?	1. _____ 2. _____ 3. _____	
		Fedhiin Hojatoota Fayyaa Hawaasaa	
342	Waa'e fedhiin hojatoota fayyaa hawaasaa dhaggessani bektuu ?	1 = eyyee 2 = hin dhageenyee ⟶	401
343	Yoo dhageesan immoo essaa dhagessani ?	1 = HEF irraa 2 = Fedhiin hojatoota fayyaa hawaasaaraa 3 = miseensoota hawaasaa 4= firra ykn hiriiyaa 5= raadiyii ykn TV 6= kan birroo	
344	Yeroo dhiyootii FHFH mana keessan daawwateera?	1 = eyyee 2 = hin daawwanneee ⟶	401
345	Yoo daawwateera ta'ee odeefanoo akamiitu FHFHtiin isiinifkennamee(deebiin 1 ol fudhatama qaba)	1 = talaalii 2 = sirna nyaataa 3 = nyaata 4 = tajaajila dahumsaafi dahumsa walin wal qabatuu 5 = HIV/AIDS fi dhukkuba naf saalaa 6= daranyoo sombaa fi qurccii	

		7= itiisaaf to'anoo busaa 8 = qabinsaaf maqsuu kosii 9 = ijaarsaaf itti fayyadama mana fincaanii 10 = Bishaan qulquluu 11= karoora maatii 12= wal hormaataa fayyaa dargaggotaa 13= mana jireenyaa fayyaanamaatiif mijatuu 14=ittisaaf to'anoo ilbisootaafi qarxxamsiitootaa 15qulqulina dhunfaa	

Kutaa 5ffaa : Itti Qufinsa waligalaa			
Lak.	Gaaffii	Qoninsa moggaasaa	Gara
401	Dandeetii koomonikeeshnii HEF tii hangam itti qufteeta?	1= Baay'ee itti qufeera 2= Itti qufeera 3= Itti hin qufnees hin gadinees 4= Baay'ee itti hin qufnee 5= Walumaagalatii itii hin qufnee	
402	Faayidaa qabeesuumaaa Sagantaa Paakeejii Ekisteenshiii fayyaa HEF tiin maatii keessaniif kennamuratii yaadnii qabdan maal fakaata?	1=Baay'ee itti qufeera 2=Itti qufeera 3=Itti hin qufnees hin gadinees 4=Baay'ee itti hin qufnee 5=Walumaagalatii itii hin qufnee	
Yaada armaan gaditti dhiyaateerati hangam wali galtuu ?			
403	Yeeroo HEF walin wal argitan Gahumsi Ogummaa HEF akka ogessa fayyaatii t ?	1=baay'een waligalaa 2=walin gala 3=ta'u danda'a 4=wali hin galu 5=gonkumaayuu wali hin galu	
404	Yeeroo wal argitan HEF hala salphaatii hubatamu ykn barsiisuu dandeesii?	1=baay'een waligalaa 2=walin gala 3=ta'u danda'a 4=wali hin galu 5=gonkumaayuu wali hin galu	
405	HEF Yeroo hunda maatii koos ta'e ummata nikabajii?	1=baay'een waligalaa 2=walin gala 3=ta'u danda'a 4=wali hin galu 5=gonkumaayuu wali hin galu	
406	.HEF osoo nama hin qodiin tajaajila kenaa jiru ? .	1=baay'een waligalaa 2=walin gala 3=ta'u danda'a 4=wali hin galu 5=gonkumaayuu wali hin galu	
407	HEF Yeeroo barbaadaman hunda idoo hojitii ni argamuu?	1=baay'een waligalaa 2=walin gala 3=ta'u danda'a 4=wali hin galu 5=gonkumaayuu wali hin galu	

Gaafanoo Koo Raawwadheera, Baay'ee Galatoommaa!!!!!!!!