



Research Article

The Role of Health Extension Workers in Primary Health Care in AsgedeTsi'mbla District: A Case of Lim'at T'abya Health Post

Seare Hadush Desta^{1*} and Shaik Yousuf Basha²

¹Department of Anthropology, Institute of Paleoenvironment and Heritage Conservation, Mekelle University, Mekelle, Tigray, Ethiopia.

²Department of Anthropology, Institute of Paleoenvironment and Heritage Conservation, Mekelle University, Mekelle, Tigray, Ethiopia.

Abstract

Health Extension Workers are the health service providers to the community in delivering integrated preventive, promotive and basic curative health services. Hitherto no studies have been carried out in Lim 'at T'abya health post focusing on the role of health extension workers. Thus the researcher has randomly selected 263 participants in order to achieve the intended objectives of the study. The researcher used both quantitative and qualitative approaches. The result of the study identified the major Health Extension Program services which are delivered by Health Extension Workers in the health post to seek malaria treatment, child immunization and Antenatal Care followed by Postnatal Care, family planning, referral for delivery, diarrhea treatment and health education. The challenges of Health Extension Workers hindering their performance for the unsuccessful health service provision identified as strong societal cultural beliefs, remoteness, poor relation with supervisors, communication system and road construction, low remuneration, lack of refresher courses and improper attention by Qebelle administrators to health agendas. Attitude of community towards Health Extension Workers communication skill, quality of service provision and social behaviors is over all positive but the following up of referred patients and the skill to diagnosing community health problems that Health Extension Workers need to work sensitively which are answered negatively by the respondents. To increase community's health post utilization, health posts should be equipped with minimum essential medical equipment with particular focus on malaria treatments, family planning, deliver, treatment of common illnesses and immunization services in the study area.

Keywords: Health Extension Workers; Health Extension Program; Health Post; Basic curative health services

Introduction

Many countries have focused on increasing production and distribution of personnel in response to inadequate numbers of health personnel. This occurred in 1980s particularly in

the community health worker cadre although in the 1990s many such programmers faltered (Schaay and Sanders, 2008, Karim, et al, 2013).The Health Extension Program (HEP) is a new program designed with a defined package of essential promotive, preventive and basic curative

Cite this article as:

S.H. Desta and S.Y. Basha (2017) *Int. J. Soc. Sc. Manage.* Vol. 4, Issue-4: 248-266. DOI: 10.3126/ijssm.v4i3.18504

^{1*}Corresponding author

Seare Hadush Desta,

Department of Anthropology, Institute of Paleoenvironment and Heritage Conservation, Mekelle University, Mekelle, Tigray, Ethiopia

Email: stanzila111@gmail.com

Peer reviewed under authority of IJSSM

© 2017 International Journal of Social Sciences and Management



This is an open access article & it is licensed under a Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>)

services targeting households, particularly mothers and children in a community. Improving access to maternal and child health services was among the major objectives of the HEP (Health Extension Program) in Ethiopia (Federal Ministry of Health, 2007/08, 2010, 2013).

The northern state of Tigray has been the leading region in the country in creating a solid platform for delivering the HEP. In 2005, about 600 health posts, staffed with 1200 Health Extension Workers (HEWs) were working in the region. This was possible due to the coordinated effort between the leadership at the regional level and a strong commitment of the district level officials together with the rural communities. However, many challenges were encountered during the initial stage of the program implementation. Some of these main challenges included: 1) incompleteness of equipment, supply and furniture at health posts, 2) absence of clear guidelines on career structure of HEWs and their relation with other health workers, 3) weak transport and communication services and 4) absence of reading and reference materials in the local language (Tigray Health Bureau, 2010; Centre for National Health Development in Ethiopia, 2010; Central Statistical Agency and ICF International: Ethiopia Demographic; Health Survey, 2011)

HEWs have their own roles and responsibilities. They go house to house to train, demonstrate, and educate families to create role models in line with health extension program and to disseminate it for the community. The HEWs provide services in the Health Posts and at the community. Health extension workers are in addition responsible for providing safe and clean delivery, managing hemorrhage, preventing infections, identifying problems and complications early and making referrals to appropriate levels of health service. The health extension workers give Supportive supervision to TBAs and Community Health Workers too (Assfaw, 2010; Desta *et al.*, 2012; Berhe and Berhane, 2014). The roles of HEWs in providing service provision in health posts are not successful to all HEP health services delivering. This could be due to the different challenges that affect to deliver the services and the negative relationship between HEWs and the community in health service delivery at the health post level. This study aimed to identify the HEW major health service provisions, explain the role of Health Extension Workers in service provision, to identify the challenges of HEWS and to assess the attitude of community towards the HEWs in *Asgeda Tsi'mbla district*, a case of *Lim'at T'abya* health post.

Research Methodology

Research Approach

In order to attain the intended objectives of the study, the researcher used both quantitative and qualitative approaches.

Source of Data

The study used both primary and secondary sources of data to find pertinent information concerning to the topic. Primary data were collected from the sampled population/targeted population through survey and in-depth interview, focused group discussion, case study, key informant interview with community elders, local administrative, HEWs and HDAs. However the Secondary source of data in this study are published and unpublished books, journals, articles, web sites, official documents such as surveys, policy statements, and professional guidelines.

Sampling Method

While conducting this study Qualitative and Quantitative approaches are used and the selected participants are selected by simple random sampling for household survey proportionally and then using the purposive sampling method data are collected from selected *Qushets* of selected participants through Interview, Case study, In-depth interview, Key informant interview, Focus Group Discussions and Observations.

Research Design

In this study in order to achieve the objectives, mixed approach is used. In order to collect the quantitative data, the simple random sampling method for household survey is used and the purposive sampling method used for In-depth Interview, Case Study, Focused Group Discussion and Key Informant interviews to collect the qualitative data. For Sample size selection the formula of Yamane (1967) ($n=N/(1+N(e)^2)$) is used for randomly selected 263 households survey and purposively selected 15 households for in-depth interview, 5 for key informant interview, 4 for focus group discussion and 5 for case studies. Descriptive data analysis is used for analyzing the already collected data's, and the quantitative data is analyzed using the simple statistics.

Sample Size

Samples of the study are taken from **770** households of the study area using the formula of (Yamane, 1967) for household survey.

$$n=N/(1+N(e)^2)$$

While n =sample size (study population)

N =source population

l = the probability of the event occurring.

e = maximum variability or margin of error 5% (0.05)

$$\text{So, } n=N/(1+N(e)^2) \quad n= 770/(1+770(0.05)^2) = 262.79 \approx 263$$

Therefore the required sample size for the present study is 263 respondents. In the study area there are four *Qushets*.

These *Qushets* are

1. *'Inda maryam*-323 Households

2. 'Indaabune aregawi'-129 Households
3. 'Adi Abayo'-189 Households
4. Menta'abo- 129 Households

Sample size for each Qushets were calculated by proportion of number of households in each Qushets i.e. 'Inda maryam-323, 'Inda-abune aregawi-129, 'Adi Abayo'-189 and Menta'abo-129, to the total number of households in the four Qushets (770). Therefore, Sample size for 'Inda-maryam Qushet is 110, for 'Inda-abunearegawi is 44, for 'Adi-Abayo' is 65 and for Menta'abo is 44. The sum of sample in the study area from each Qushets is $110+44+65+44 = 263$ respectively.

Depending on this sample size for qualitative data's purposive sampling method was used. From the total sample size of 263 household purposively 15 respondent are selected, for key informant interview 5 households are selected purposively, four group discussion are also conducted in this study in each group 8 participant are participated, and using the purposive sampling method 5 case studies are conducted.

Data Collection Tools

Household Survey

The questionnaires are developed first in English language then it translated into local language, Tigrigna, to collect the quantitative data from the total sample size (263) of the study. The questionnaires are pretested for the clarity of questions on non-sampled households.

In-depth Interview

The primary data are collected through qualitative and quantitative data gathering technique and status of the informant's face to face interview by using pre-prepared questionnaire. The questionnaire is both open ended and closed ended questions to collect data from the respondents by using interview. To get deep rooted information the researcher is used in-depth interview on the issue of health extension workers in the study area. Generally the researcher is used fifteen In-depth interviews which are purposively selected.

Key Informant Interview

In the context, the term "key informant" means concerned body who have close relation to the primary health care and who have deep information and knowledge about the health care. These individuals are from health facilities or other service organizations in the community, HEWs, health workers, religious leaders and community leader. The same questions are asked during all the interviews, but the interviewer is free to ask follow-up questions in order to get as much information as possible from the informant. The researcher has used five key informants (three community elders, two religious leader) purposively selected from the sampled respondents.

Focus Group Discussions

A Focus Group Discussion (FGD) is an organized discussion on a single topic in a specified duration. It helps

in the collection of qualitative (feelings or perceptions of target audience) information. The focus group discussion technique is helpful to triangulate the data that are collected using other methods. As a result the participants get the chance to discuss about the roles and challenges of health extension workers. Furthermore, four focus group discussions were conducted, with two groups with women participants and two-group discussion with men participants. In each group discussion eight participants were participated.

Case Study

A case study is a detailed description of one person's or one group's experience with an issue. It helps to put pieces of information into their proper perspective and they make a greater emotional impact than do statistical data. The researcher used four (two women elders, two men's from community elders) case studies purposively selected about the issue the role s and challenges of health extension workers.

Observation

Using non participant observation technique, the researcher observes a specific location while trying not to attract much attention. The researcher has recorded as many observations as possible in a field diary. Therefore, the researcher has observed something the activities of HEWs in health post and out of the health post as well as the health post visit of the community.

Strategies of Data Analysis

The information collected from both primary and secondary sources, is analyzed through descriptive way. The researcher has first transcribed qualitative data from local language to English and translated in to meaningful concepts and pattern. At the same time quantitative data are analyzed using descriptive statistics like tables, frequency, and percentage and pie chart representation (Yamane, 1967).

Study Area

The present study is conducted in Asgede Tsi'mbla district, Lim'at T'abya. The T'abya is one of the 27 T'abya of Asgede Tsi'mbla district. In this study area there is only one health post.

Geographical Location

Lim'at T'abya is found in Asgede Tsi'mbla district which is the north western part of Tigray regional states. Lim'at T'abya is located 43Km in the western part of Asgede Tsi'mbla district, 'Inda-baguna town. Lim'at T'abya is located at distance of 64Km from shire and 371Km from Mekelle, the capital city of Tigray regional state. Lim'at T'abya is bounded by Rahwa and 'Adi-Mehemeday T'abya in the western part, Hibret T'abya in the northern part, Debre-mariam in the southern part as well as Alogen T'abya in the eastern part. Lim'at T'abya administratively sub divided in to four (4) rural Qushets.

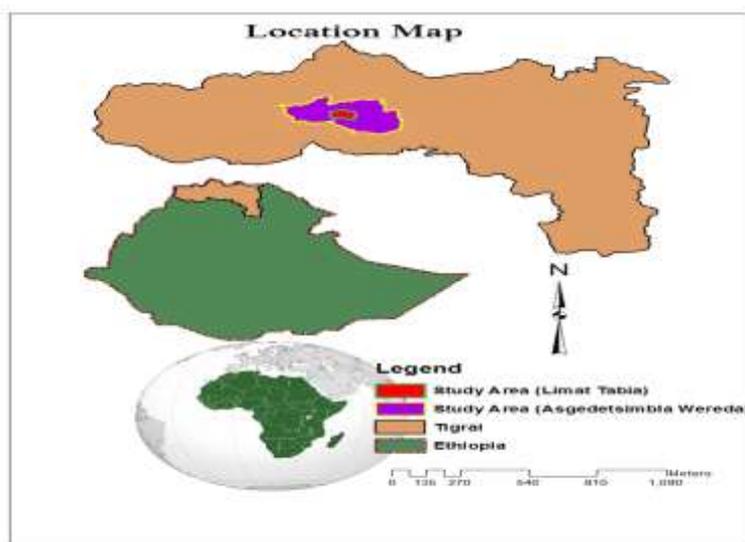


Fig1: Map of *Lim'at T'abya*, AsgedeT'simbla district
 Source: Map Developed by the Author (April 2017)

Results and Analysis

This chapter includes the characteristics of respondents, major health service utilization of respondents, the role of health extension workers, the challenges of health extension workers in service delivering and the attitude of the respondent towards health extension workers.

Socio-Demographic Profile of Sampled Respondents

The following tables show the socio-demographic distribution of respondents. These includes the sex, age, religion marital status, marriage types, educational level, languages, household size, occupation, health facility to households, mode of transport and travel time and sources of income.

Table -1: Sex and Age Characteristics of Respondents

Socio-demographic variables		Frequency	Percentage
Sex	Male	178	67.68
	Female	85	32.32
Age	18-26	7	2.7
	27-35	44	16.7
	36-44	62	23.57
	45-54	93	35.36
	55-62	47	17.87
	Above 62	10	3.8

Source: Own Field Survey (January 2017)

This study is done in *Asgede Tsi'mbla* district of north western Tigray regional state. In this study a total sample size of 263 households are participated. The response rate in the study was 100% with complete data obtained from 263 households. The majority (67.68 %) of respondents are men with woman's accounting for only 32.32 % of the respondents. The 35.36 % of the respondents are the largest proportion in the age group of 45-54 years old, while the

least 2.7 % of the respondents represented age groups are observed between 18-26 years old.

Table- 2: Religion, Education level, Marital status, Marriage type & Language characteristics of respondents

Socio-demographic variables		Frequency	Percentage
Religion	Christian orthodox	247	93.92
	Muslim	16	6.08
Education level	Cannot read and write	258	98.1
	Primary	5	1.9
Marital status	Married	262	99.62
	Divorced	1	0.38
Marriage type	Monogamy	247	93.92
	Polygamy	16	6.08
Language	Tigrigna	247	93.92
	Tigrigna and Saho	16	6.08

Source: Own Field Survey, (January 2017)

Table 2 shows, majorities 93.92 % of the participants of the study areas' religion is orthodox Christian and the remaining participants (6.08 %) were Muslims. The majority of the respondents had never enrolled informal education (98.1%) and 1.9% of the respondents had attended only primary school (grade 1-8). The marital status of respondents was observed as all are married except one divorced. The marriage type, both monogamous and polygamous marriage types are practicing by the community. Majorities are monogamous whereas the remaining (6.08%) are polygamous. The languages spoken by the respondents were observed as the (93.92%) largest proportion spoken language is the Tigrigna, whereas the

least (6.08%) was the *Saho* and *Tigrigna* speakers at the same time.

Table 3: House hold size, closest health facility, Mode of transport to health facility, Travel time to health facility, Occupation and Source of income characteristics of respondents

Socio-demographic variables		Frequency	Percentage
House hold size	<3	37	14.07
	3-6	142	53.99
	>6	84	31.94
Closest health facility (multiple response)	Health post	261	99.24
	Private health clinics	261	99.24
	Health center	2	0.76
Mode of transport to health facility	Foot	263	100
Travel time to health facility	<15	10	3.8
	15-30	95	36.12
	30-60	62	23.58
	>1 hour	96	36.51
Occupation	Farmer	263	100
Source of income (multiple response possible)	Agriculture i.e. crop, livestock & traditional gold mining	263	100

Source: Own Field Survey (January 2017)

The household family sizes ranged from 3-6 are the most frequent family size which is 53.99%. The 31.94% of them family size is greater than or equal to six family members and the remaining 14.07% of respondents were less than three family size. The respondent's mode of transport to health facilities was observed as all most all (100%) they are traveling on foot. The respondent's closeness to health institutions was observed as the majority (99.24%) was close to health post and private health clinics where as the least remaining (0.76%) was close to health centers. Almost all 263(100%) of the study participants are farmers. The livelihoods of all (100%) respondents were dependent on agriculture such as crop production and animal rearing and traditional gold mining.

HEP Implementation in the Health Post

The HEP health packages service delivery by health extension workers began to implement in the health post after 2003 E.C. First two female health extension workers were deployed to deliver sixteen health packages to the community. But, later one female health extension is added in order to assure the quality of service provision in health post.

More over the result of key-informant, 58 years old man's interview supports this finding (November/5/2016) as-

"This health post is constructed after 1987 E.C. Initially there were two health professionals to give service for community. At that time the occurrence of malaria diseases was very high. After 2003 E.C

HEWs are deployed and began to implement the sixteen health packages in health post."

The health post utilization of respondents in HEP of the study area within six months is identified by asking if they are visited the health post or supervised by health extension worker.

Table 4, Q.1 shows, 263 participants are interviewed regarding the utilization of health post which gave 100% response rate. Less than half of the total sampled respondents (107(40.68%)) visited the health posts with six months at least once, whereas the remaining 156 (59.32%) respondents did not visit the health post within six months.

Table 4, Q.2 shows that, with a multiple response of respondents, Out of the 107 households 17 women's of them visited health post for family planning, 43 women's for child immunization, 27 women's for ANC (pregnancy care), 13 women's referral for delivery, 51 (20 men's and 31 women's) to seek malaria treatment, 19 women's are for PNC, 9 women's for health education and 10 (7 men and 3 women's) to seek Diarrhea treatment.

About 107 respondents replied that as they are visited the health post at least once within six months. This shows that, the health post utilization of respondent's is low (40.68%). This help to say there is low utilization of health post. There are different reasons of respondents to not utilize the health

post. These are long distance traveling to health post and lacks of curative drugs in health post. These factors affect the health post utilization of households.

There are different factors that affect the health post utilization of community. Respondents are replied that they are preferring health post due its proximity (nearness) and HP closeness to their homes and its affordability. Women’s are not interested to stay out of their homes. They have a lot of works (many responsibilities) in home like looking after children and preparing of foods. Due to that they want to come back earlier to their homes. The following FGD1 with 37 years old woman clearly depicts the factor that attracts to health post utilization of women’s in the study area.

“The reason why I am preferring to go to health post than other health institutions is that due to it is affordable and close to my home. Even though there are private clinics in our village and health center, which is three hours far with a good quality of service, they are not affordable to us. The closeness and affordability attracts me to visit it than others”

Regarding the decision making relating to maternal and child health, husbands has a great role to decide on these issues at household level in the study area. According to AH³ (In depth interview, 41 years old man), this is because husbands have the power to decide in every household activity including the services that their family members should get. So, every decisions made by husband is respected and followed. The health post utilization of women’s is influenced by husband’s decision making. The following case study-4, 30 years old woman clearly shows the husband’s dominance in decision making in household.

“I visited health post when I was sick. In my family, the husband decides where to go if someone is sick. Most of the time my husband prefers the health post than other health institution due to its proximity. Last month my child was sick and went to the health post. However, I thought that there is no medicine in the health post from my experience and other neighbors. As a result I want to go to the private clinic which is far from our village .But my husband did not agree with me to take the child to the private

clinic because of the distance and its expensiveness.”

The negative attitude of the community towards HEWs skill to diagnose diseases influences the preferences of the community regarding health service providers. Thus, most of the community members prefer to go to private clinics and health centers than the health post. In the FGD (Focus Group Discussion) with males, discussant indicates that the reasons for not using the health post services are the doubt of professional skill of the HEWs in diagnose the diseases in the study area. One of the FGD-2, 46 years old man as participant reported the challenge relating with the skill of the HEW in the area as follow.

“I visited the health post last year because I was sick malaria. HEWs test to my blood and told to me as I am not sick with malaria, but I know as I am sick because I sleep in my home for one week and did not feel healthy. Next time I forced to go to the health center. They told me as I am sick malaria and give me drug with instructions. I take the drugs based on the directions given by doctors. Finally am ok now. So, I understand that our HEWs in health post are lacks the knowledge to identify diseases.”

The other major factor that affects the health post utilization is less availability of curative drugs in the health post. FGD-2, 54 years old man as participants replied that as they are forced to go to other health facilities due to lack of drug supply in the health post of the study area.

“It is better to go to other health facilities than the health post. Because it is known that there will not be drug even if HEWs identify your diseases. So, by spending more money you will get drugs from private clinics or you will go to the health center. In general, I prefer to go to health center than health post. In my opinion HEWs are simply here in the health post to say ...there is no drug”.

The major services of health post utilization of respondents are to seek malaria treatment, child immunization and ANC followed by PNC, family planning, referral for delivery, diarrhea treatment and health education.

Table 4: Respondent’s Health Post Utilization

Q.1. visited the health post within 6 months n =263	Frequency		%
	Yes	107	
No	156		59.32
Q.2. the reasons to visit health post Multiple responses possible n=107	a)Family planning	17	6.46
	b. Health Education	9	3.42
	c) Child immunization	43	16.35
	d) Antenatal	27	10.26
	e)Referral for delivery	13	4.94
	f) to seek malaria treatment	51	19.39
	g)PNC	19	7.22
	h)Diarrhea treatment	10	3.80

Source: Own Field Survey, (February/2017)

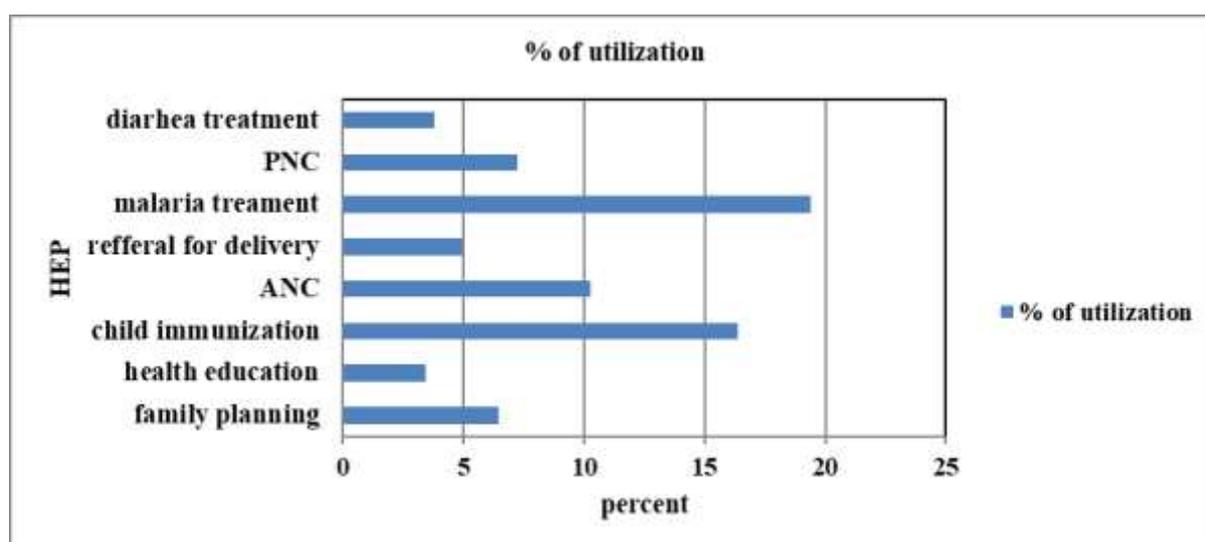


Fig. 2: Health post Service mentioned by Respondents
Source: Own Field survey (February/2017)

Fig. 2 shows the comparison in HEP services utilization of respondents in the study area

Table 4 shows, 6.46% women's of them have visited the health post for family planning, 16.35% women's for child immunization, 10.26% women's for ANC, 4.94% women's referral for delivery, 19.39% men's and women's are sick/for malaria treatment, 7.22% women's are for PNC, 3.42% women's for health education and 3.8% of men and 3 women's are to seek Diarrhea treatment. The health post utilization of respondents to seek malaria treatment is high when it compared to other HEP service utilization of respondents, followed by child immunization, ANC, PNC, family planning, referral for delivery, diarrhea treatment and health education. This is due to the occurrence of malaria in the area and the affordable price for anti-malaria in the health post. The following in-depth interview of HEW-1, concern to Limi'at Tabiya supports to this idea.

"The awareness of the community about malaria control and prevention is not that much developed. Malaria prevalence in this village is very high. Due to that reason many people are sick malaria every day and they came to health post to seek treatment. Every month we measure the frequency of patients for every disease. The proportion of patients in the health post for malaria treatment exceed from all other HEP services which are delivered in the health post."

Services Delivery by HEWs

The following table shows the reasons why respondents are visited health post. At the same time it shows the health professionals that assisted to respondents at the health post.

Table 5, Q.1 shows about 17 (6.46%) women's are visited the health post and 14 (5.32%) of them are assisted by health

extension workers and 3 are not assisted and did not get the service. For child immunization 43 (16.35%) women's are visited the health post and almost all are assisted by health extension workers. About 27 women respondents are replied that as they are visited the health post for ANC and 26 of them are replied as they are assisted by health extension workers and one of them is not assisted by health extension workers.

About 13 women's are replied as they visited the health post for referral to delivery. Almost all are replied as they are assisted by HEWs. The 51 (19.39%) respondents are also replied as they are visited the health post for malaria treatment, 49 are replied that as they are assisted by health extension workers and 2 are not assisted, at the same time 19 women's are also replied as they are visited the health post for PNC and all are assisted by health extension workers. The 9 respondents are also replied that as they are visited the health post for health education and all of them are assisted by HEWs. In the last, 10 respondents are visited the health post for diarrhea treatment and assisted by health extension workers.

Respondents who are visited health post for different cases are able to assist by HEWs in health post. But this is not successful for all HEP. The above table shows as respondents in family planning, ANC and malaria treatment are not assisted by HEWs. The unavailability of HEWs in health post and unavailability of curative drugs are the main reasons reported by respondents.

Table 6 shows the health professionals supervision in HEP services which are delivered by HEWs by supervision of households.

Table 5: Respondents assisted by HEWs in the Health Post

Q1. The reason to visit the health post, and who assisted you?	Total	%
a)Family planning	17	6.46
Assisted by HEW	14	5.32
None	3	1.14
b. health education	9	3.42
Assisted by HEW	9	3.42
None	0	0
c) Child immunization	43	16.35
Assisted by HEW	43	16.35
Non	0	0
d) Antenatal care	27	10.26
Assisted by HEW	26	9.89
Non	1	0.38
e)Referral for delivery	13	4.94
Assisted by HEW	13	4.94
Non	0	0
f) to seek malaria treatment	51	19.39
Assisted by HEW	49	18.63
Non	2	0.76
g)PNC	19	7.22
Assisted by HEW	19	7.22
None	0	0
h)Diarrhea treatment	10	3.80
Assisted by HEWs	10	3.80
None	0	0

Source: Own Field Survey, (January 2017)

Table 6: HHs (HouseHolds) Supervision by HEWs and HEP Services

Q.1.Who visited you in the last (6) months from health facility? (multiple response possible) (n=263)	Frequency	%
HEWs and HDAs	120	45.63
HDAs only	34	12.92
Didn't remember	3	1.14
Non	106	40.30
Q.2.the message by HEWs (multiple response possible) (n=120)		
a) Message on Immunization	32	12.16
b) information on diarrhea control	96	36.50
c) Information on pregnancy care	21	7.98
d) pit latrine construction	81	30.79
e) promote safe water use	48	18.25
f) Information/discussion on Family planning	31	11.78
g) health education	20	7.60
h) Community health conversation	11	4.18
i) Information on malaria control	61	23.19

Source: Own Field Survey (January, 2017)

Table-6 shows, if any health professional visit respondents in a multiple response if any. Table 6, Q.1, shows 45.63% of respondents replied as supervised by HEWs and HDAs, 1.14% respondents did not remember who visited them, 12.92% are visited by HDAs only and the remaining 106 (40.30%) are replied as they are not visited by any health professionals. None of the respondents replied as they are visited by HEWs independently. Respondents asked the messages received during health extension workers supervision. By allowing multiple response if any, the table-6, Q.2 show as 96(36.50%) respondents replied the message as information on diarrhea control, 81(30.79%) promotion of pit latrine construction, 61(23.19%) information on malaria control and prevention followed by 48(18.25%) promotion safe water use, 32(12.16%) message on immunization, 31(11.78%) information on family planning, 21(7.98%) message on pregnancy care, 20(7.60%) health education and 11 (4.18%) on community health conversation.

Below half of the sampled households (45.63%) are visited or contacted by HEWs whereas the remaining 54.37% of respondents are not supervised by health extension workers. Respondents those supervised by HEWs are also asked the messages that received from HEWs. About 36.50% of respondent those who are contacted by HEWs and received the information on diarrhea control, 30.79% pit latrine construction and 23.19% households are visited by HEWs in this study for malaria control and prevention. These are the top three HEP which are delivered by health extension workers supervision to respondents followed by promoting safe water use, immunization, FP, ANC, health education and community health conversation.

In general, Household supervision of Health extension workers is less emphasized in all HEP. Supervision of HEWs for households on HEP is emphasized on diarrhea control and pit latrine construction in the study area (Berhe and Berhane, 2014; Yitayal *et al.*, 2014). HEWs are focusing on controlling and prevention of diseases. The information on diarrhea control and prevention service share the highest frequency in supervision by HEWs in the study are followed by promotion on pit latrine construction, malaria control, promote safe water use, information on family planning, message on immunization, information on pregnancy care, health education and community health conversation (World Health Organization, 1987, 2008).

According to the in-depth interview with HEW-3, the high emphasis in diseases prevention and control of health extension workers is to create healthier community through prevention of diseases.

“In health post, health extension workers are expected to supervise 75% of their time to community and 25% in the health post to deliver curative

services and advice to peoples who came to health post. Due to that reason we are supervising to households in order to create awareness in the community about diseases prevention and control. At the same time HEWs are visiting to pregnant women and advising them to deliver at health institutions.”

Fig. 3 shows the comparison of health post utilization and household supervision of respondents in the study area. Fig. 3 shows households who didn't utilize the health post shares the highest percentage (59.32%) followed by households who are not supervised by HEWs (54.37%), households who are supervised by HEWs (45.63%) and the least is households who utilizes health post (40.68%).

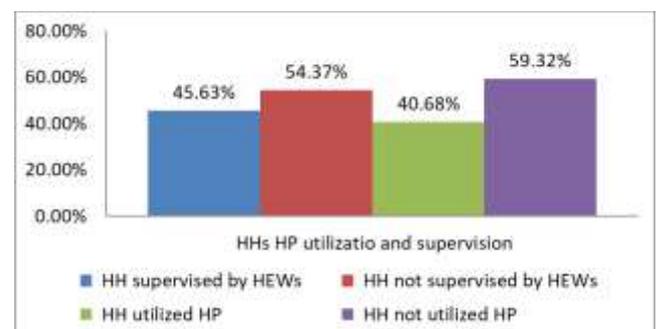


Fig. 3: HEP (Health Extension Program) Supervision by HEWs and Utilization of Health Post

[Source: Own Field Survey, (January, 2017)]

This shows there is low utilization of health post of respondents and the low level of supervision of HEWs for households on HEP health services in the study area. This helps to say the low utilization of health post by households is resulted from the low supervision conducted by HEWs in the community. Generally, the major HEP in the study area, based on the utilization frequency of respondents are eight (8) health packages (malaria treatment, immunization, ANC, PNC, family planning, referral for delivery, diarrhea treatment and health education) are identified and based on the supervision of health extension workers for households are also identified nine (9) health packages (diarrhea control and prevention, promotion of pit latrine construction, malaria control and prevention, promoting safe water use, immunization, family planning, ANC, health education and community health conversation).

The Role of HEWs

The role of HEWs and Health development groups is vital to enhance modern health services' acceptability. HEWs at health post are establishing the linkage between the community and modern health care practice. Health education for women's twice a month in the study area by health extension workers is given by HEWs to improve the health post utilization of maternal and child health. This helps to link the modern health service and the community and to strengthen the relationship between HEWs and local communities.

Moreover, the result of FGD-4, 39 years old woman supports this finding.

“We have meeting with health extension workers two times (7 and 27) every month in health post. The agendas for discussions are health of women’s and children as well as personal hygiene. We discuss openly in every agendas and health extension workers give us explanation on health packages. This helps to have strong relation between health extension workers and women’s. This strong relation promotes to increase the communities health post utilization.”

Social organizations help to health extension workers for disseminating health information. HEWs are available in churches and mosques to transfer health messages to the local community. But, they are not fully utilized the social organization of the study area. There are also other social organizations that help to facilitate health information dissemination which are untouched by health extension workers. There are religious ceremonies in which many people are coming together in one place. Be’ale Mariam (Saint Mary) every 21 in a month women’s celebrate it lavishly and the relation among the members of the group is very strong. HDA are actively involving to disseminate the health messages in these ceremonies.

The result of key informant-1, 53 years old man’s interview supports this finding.

“There are different religious ceremonies in the village. For example Be’ale Mariam and Senbete is celebrated by women’s every 21 in a month. Many people are involving to celebrate the ceremony. So, the involvement of health extension workers should not be limited in health post and in churches to disseminate messages. The health extension workers involvement with the social activities of the community can promote the awareness of the community about health.”

Organizing the women’s based on this social organization can help to easily transfer health messages in between the members which is HEWs fail to utilize it. The HEWs are also served to give voice for the demands of community in order to make health services more responsive to the community needs. The HDA which mobilizes women in maternal and child health especially for pregnancy check-ups and child immunization also promotes awareness of the community on the importance of the services.

The study shows that health development army does better than HEWs in supervising (visiting) households. From 263 participants 54 respondents replied as they are visited by HDAs independently, whereas none of the respondents replied as they are supervised by HEWs independently.

HEWs and HDAs are supervised 120 households together, 3 households replied as they did not remember who visited them and 106 are visited neither by HEWs nor by HDAs. HEWs are also shown improvements in supervising (visiting) households on the HEP; these are information on diarrhea control, pit latrine construction, Information on malaria control and promoting safe water use and the least are immunization, FP, ANC, health education and community health conversation. This shows HEWs are more emphasizing in diseases control and prevention.

The following key informant-4, 36 years old woman’s interview supports this finding.

“In previous the supervision frequency of HEWs for households were very low due to different factors. For example, household’s settlements are very scattered and very hilly areas. The unable to reach the house of households remains a constraint still now. But, health extension workers are showing improvement to visit households which are near to and safe for transports. In the time of visit of health extension workers they advise to control and prevent diseases and to increase institutional delivery of women’s.”

The less effort of skilled health workers for saving women and newborns lives and prevention of communicable diseases; and the provision of services for malaria treatment in the health post letdown the acceptability and utilization of the services in the health post. Not only the less effort of the health extension worker but also the social beliefs of the community, long distance traveling of respondents to health post and the absence of curative drugs in health post down wards the utilization of health post. The current study shows health extension workers are visiting pregnant women’s during pregnancy specifically, but the institutional delivery and attending PNC is still low. Having more responsibility in home activities, fear of referral or operation and the proximity of health centers are the main reasons for low institutional delivery of women’s. In general the result of this study shows that still the health post utilization of women’s for maternal and child health is low and the HEWs supervision for ANC, child immunization, and family planning is lower than the others HEP i.e. malaria control and promoting pit latrine construction. This indicates that HEWs are emphasized on disease control and prevention than other HEP services in the study area.

This study shows that findings on HEWs effectiveness on maternal and child health service delivering in general, the health facility delivery of women is very low. None of the women’s in the study areas are assisted by health extension workers. The low competency and confidence of HEWs in assisting births, less favorable working conditions at the health posts, workload and walking long distances at night

to assist births at home might also be attributed to this low performance of HEWs in assisting births.

The following case study of HEW-1 at Limi'at Tabiya health post vividly depicts the challenges for the unsuccessful institutional delivery of women's.

"Women preferred to deliver at the health post than other health facilities. Even they are not willing to refer to health centers due to different reasons. One is the fear of operation. Women's did not trust us if we refer them to health center. They think that doctors will operate them for delivering. The other factor is the cultural beliefs of that pregnant woman should not contact with other pregnant women's. They believe that pregnant women and children are easily exposed to evil eye (Buda). So, they prefer to deliver at the closest health post or at home than other health institutions. But, if health posts are equipped with enough materials and educated man power (HEWs). I am sure the home delivery of women's in this T'abya will be zero."

The Role of HEWs in Maternal and Child Health

In the time of household supervision, HEWs are sharing information on maternal and child health services. In the current study, HEWs are able to deliver and share information on the following maternal and child health services in the study area.

Family Planning

This presents the messages by HEWs about family planning; the area to obtain and the source of information are asked what the messages are by the HEWs. Questions are asked to the purposively selected current users of family planning respondents in the study area. Health extension workers in the case of family planning are assisting in the health post and visiting or supervising the households. This study shows sixteen women's are currently users of family planning. They receive from health post and assisted by health extension workers. The main initiatives for visiting the health post for family planning was that advised by HEWs, advised by family members, and advised by HDAs.

The health extension workers are able to share the information on the area where to obtain Family Planning (FP), how to use and when to use on FP.

"I saw HEWs are visiting home to home of the village households and they are teaching and supervising the changes on HEP packages utilization. Last time one HEW visited my home and in the time of visiting (HEW) gives me information on family planning. She advised me to Use family planning. Using models (cartoon photo) she show me How to use, when to use it and where to obtain FP. Now I am using the short term family planning

and I received it from the health post and assisted by HEWs."

(Case study-3, woman 28 years old)

From the in-depth interview of the currently users of family planning in the study area, they explained their preference of using the health post for family planning. The preference of health post by currently users of FP women's is due to proximity of health institution to home, Inexpensiveness, good Behavior of staff and good quality services are mentioned by the respondents. The following in-depth interview-7, 31 years old woman supports the finding.

"Most of the time the preference for health post is due to its proximity. Personally I prefer the health post to utilize health services if they are available. It is about 30 minutes to my home on foot. Currently I am using the short term family planning. I received it from health post and health extension worker assisted me."

Child Immunization

In the survey, a purposively selected woman's who have a child age <12 months are asked in 1 group (FGD) whether they had vaccinated their child, what initiated, what was the reason and had a vaccination card for the child and the source of information. The result shows that, Women's are initiated for visiting the health post due to that-child was sick, advised by health extension workers, advised by family members and mobilized for vaccination by health extension workers and HDAs. The role of HEWs in immunization was that mobilizing the community for immunization by supervising the households and HDAs. The role of HDAs is more important than HEWs in mobilizing the community for child immunization. In the health post, HEWs are assisting to vaccinate the child. About Forty-three women's are reported as their children are immunized by HEWs from the surveyed households in the health post. HEWs are not only assisting in the health post but also they are supervising to households and informing to women's to fully immunize their child. In the study area from the totally surveyed households thirty two respondents are replied as they are supervised and received the information/messages of child immunization from HEWs. This helps to say advising women's to immunize children by health professionals after delivery improves the child immunization service utilization of households.

The following FGD-4, 32 years old woman discussion clearly shows the advices given by HEWs.

"I saw that HEWs are mobilizing the women's for immunization in church. HEW was also visited my home and told me to vaccinate my child remember that the message by HEW. If child is vaccinated diseases will not attack easily. I can't remember all

the HEW said because I can't write the note but she told me a lot of things regarding the immunization for my child."

Respondents are also asked the reason for preferring health post and replied that due to nearness to home, inexpensiveness and good behaviour of care providers are mentioned. This shows that households are considering the price and proximity of health institutions for utilization. Respondents prefer the nearest and cheapest price health institutions.

Pregnancy Care/Antenatal Care

In this study, each woman who had a child aged 1-2 months was initially asked whether they had gone for ANC check-up to health institutions or visited by HEW when they are pregnant with the child, where to deliver and after delivery. About 27 women's are visited the health post for ANC and 26 women's are assisted by HEW. About 21 women's are visited by health extension workers while they are pregnant and received the information of pregnancy care. The information by HEWs during visit the pregnant women's are mentioned by respondents. Health extension workers are advised for pregnant women's to get checked up during pregnancy, to take extra amount of food, to take rest, to avoid heavy work, to seek care if there is a health problem, to save money for emergency, to arrange for emergency transport, to ensure a Trained Birth Attendant, put the baby to breast immediately after delivery,

Exclusive breastfeeding

The following in-depth interview-8, 26 years old woman supports the finding.

"When I was pregnant before 3 months, HEW come to my home and advised me to take rest and to avoid extra works. She also advised me to take extra food, which is different from the previous one. At the same time she advised me to arrange delivery in health institution."

The initiative to visit health post for ANC of women's is they are sick, advised by HEWs and advised by family members. In this case health extension workers have an important role to advise pregnant women's to attend pregnancy care in health institutions. The preference of health post by respondents is due to its proximity and inexpensiveness. This shows that Closeness of health facility to households increases the utilizing of health facility by households. The following in-depth interview, 32 years old woman supports the finding.

"When I was pregnant HEW visited my home and advised me to attend health institution for pregnancy care. Then I visit health post three times delivery of my child. In health post, HEW assisted me and advised me to deliver at health institution. The

reason why I am choosing health post is that it is close to my home and it is also affordable in price."

Referral for Delivery

The utilization of referrals delivery is the least utilized health service of respondents. From twenty seven women's who are visited the health post for ANC and twenty one women's who are visited by health extension workers during pregnancy, only thirteen women's of them are visited the health post and referred by health extension workers to health center and delivered in the health center. From the sampled respondents, delivery at health post is zero. None of the women's are reported as they are delivered at health post and assisted during delivery by health extension workers. The following case study-4, 30 years old woman supports the finding.

"I went to health post for health check-up. But health extension workers told me to go to health center. I asked her why you did not assist me. She said we did not have the materials for pregnancy check-up. Finally She calls ambulance and referred me to health center and I stayed for 2 week at health center."

Women's who attends ANC in the health post are not going for delivery in the health centers due to different factors. These are having more responsibilities of women's in home activities, the cultural beliefs and the far-off of the health centers are the main reasons. The following focused discussion-3, 28 years old woman conducted with women's clearly shows why respondents prefer to deliver at home.

"When I was pregnant to my last child I visited the health post to health check-ups as advised by HEW in her visit time of my home. However, I deliver to my last child in my family home. The reason why I choose to deliver in my family home was that health center is very far and I did not have any relatives to stay with them until my delivery time. Not only the above one after delivery the transport to return of my home also the question."

The needs of all women's group discussants preferred health center for their next delivery place. It is due to the thought of respondents on skill of health extension workers followed by shortage of medical supplies and equipment necessary to provide the normal delivery services. As shown in this survey, HEWs had not received refresher training in clean delivery and newborn care, and it was the single priority area that HEWs would prefer to attend a refresher course. This help to say it is critical to improve HEWs' skill and equip health posts with the necessary medical equipment and supplies to avoid unnecessary referral of clients who could be attended at health post level. HEWs reported that there are patients who are not willing

to go to referral health facilities due to financial problems, distance to the referral health facilities and lack of awareness. Lack of transportation is also stated as one of the factors that hinder the use of referral facilities as most of the community traveling on foot as the main means of transportation.

Post Natal Care

The current study shows that none of the women's participated in the study was visited by health extension workers after delivery. HEWs are visiting the households for promoting pit latrine construction, safe water use and controlling malaria. But from the participants of the study no one replied as they are visited by health extension workers or HDAs after delivery. None of the women's who are visited the health post for check-up and delivered at health centres are visited by HEWs after delivery.

"I (FGD-3, 33 years old woman) visited the health post for ANC checkup as HEWs are advised me to have a health check-up at least 4 times in my pregnancy time. I followed the checkups and lastly HEW is told me to deliver in the health institution. After delivery, any health professionals did not visit me. The supervision of health extension workers is most of the time emphasizes on visiting pregnant women's. But the supervision of women's after delivery by health extension workers is low."

The Role of HEWs in Diseases Prevention and Control

Malaria treatment and control

In the health post 51 individuals are visited to seek malaria treatment and 49 peoples are assisted by health extension workers. About 61 households are visited by health extension workers received information from HEWs about malaria control and prevention. To identify the role of HEWs in malaria treatment and control case studies are conducted. HEWs are creating awareness to households about the controlling mechanisms of malaria and assisting in the health post for patients. During the supervision of households HEWs are sharing the messages of Information on the causes of malaria, to use bed nets in the time of sleep, to clean the areas which mosquito are reproduce, Information on the availability of treatments for malaria in the health post and Information on the signs of malaria.

According to the respondent (Case study-2, 42 years old man), the availability of curative drugs in the health post for malaria is the main problem.

"Before two months I was sick and I went to the health post. Then HEWs told me as I am sick with malaria. She gave me the medicines with instructions how to take it. Then I take all the medicines and following the instructions given from

HEWs. After a time the health extension worker comes to my home and advised me to use the bed nets, to fill and clear dirty waters around my home. I did as HEW advised me. Now the compound of my home is clean and free from any trashes."

The role of HEWs in hygiene and Environmental Sanitation

Information on diarrhoea control

This study shows HEWs had important role in supervising respondents for diarrhea control. The information which received by the respondents are discussed in FGD-2, 46 years old man with respondents.

"In the previous season HEWs are visiting households and advice on controlling and preventing of diseases. For example, in the last month one HEW was visited my home and discussed about how to prevent diarrhea. She told me the early sign and symptoms of diarrhoea."

Promote safe water

Distributing water guard to households are the main activities of HEWs in promoting safe water using in the community. Respondents (Case study-1, 39 years old man) asked how health extensions workers are helping in the case of safe water using. HEWs are advising to use chemicals that kill germs of a water before they drink,

"HEWs visited households and distributed and informed to use water guard to each house. In line with this, they give us brief explanation on the instructions of using it. In general their role in promoting safe water use and controlling communicable diseases seems good than other HEP service provision."

Promotion of pit latrine construction

HEWs are advising to households to own toilets during their supervision in the village. They are promoting the use of pit latrine in household's level. There are households who tried to construct but its status is the lowest. All the constructed latrines are not based on the required (Nigusse *et al.*, 2007). This study shows that the information sharing is a little bit good but the regular follow up of health extension workers remains low. There are also households who did not receive the information on pit latrine construction from health extension workers. This shows that the house hold supervision by health extension workers in the study area is low.

The following FGD-1, 29 years old man discussion shows the messages by HEWs to households on latrine construction.

“HEWs and HDAs advised me to prepare toilets in my home and I tried to construct a toilet but I don't know the basic requirement to be a good and standardized toilet. HEWs only told me to construct a toilet. To the best of my knowledge I have tried to implement the advice of HEW but the lack of follow up from HEW affect not to be finishing it.”

The challenges for HEWs

A study conducted in Gender and the role of Health Extension Workers in rural Ethiopia shown that, HEWs in Tigray mentioned travelling long distances that are inconvenient and tiresome; and at times, carrying their babies on their back. In addition to implementing all activities of the HEP they are expected to also do agricultural activities in their work areas, as part of an exchange arrangement they have with Agricultural Extension Workers (Jackson and Kilsby, 2015, Koblinsky *et al.*, 2010; McAuliffe E and MacLachlan, 2005; Last Ten Kilometers Project, 2008 & 2009). Similarly in this study, to identify the challenges an in-depth interview is made with three HEWs in the study area. According to the health extension workers of the study area, there are different challenges that are faced in their daily activity to deliver service. There are social, technical and organizational challenges that hinder the performance of HEWs in the study area. The challenges which are mentioned by HEWs in the study area are poor road network, working in remote areas, poor communication system, cultural value of the community, lack of refresher courses, and poor relation with supervisors, and low remuneration and lack/low supply of curative drugs to health post. HEWs commended the contribution of the HEP for improving preventive activities at the household level. However, they are concerned regarding communities' increased demands for essential curative services. The large amount of time spent by HEWs for household visits (75% of their time) prevented them from engaging in the provision of curative services within the health post. In addition, the poor infrastructure of the health posts in terms of water facilities and shortage of infection prevention materials (masks, goggles and shoes for the delivery room) are mentioned by HEWs as major barriers to provide adequate care. This study shows that HEWs are facing challenges that hinder their performance.

Working in remote area

HEWs of the study area dislikes that working in the most remote area which is far from towns. As environment is Harsh and most far from towns, HEWs are not feel good to work in the place.

Low remuneration

HEWs are not happy with their salary they are receiving monthly. They strongly recommended that the works and the responsibilities which they have and the benefit they are getting. The following in-depth interview (HEW-2) vividly

shows the low remuneration and having many responsibilities of HEWs in the study area.

“In the case of remuneration, I went to explain it in short as “We are dying while we are caring about the life of peoples “As I am HEW, government expects me to deliver all the 16 components of health packages in the community. But the salary which is paid to me monthly is very low. If the responsibilities given to me and the incomes which I am getting are compared there is a large gap. Even the salaries of HEWs different with other agriculture extension workers which have not equal works with health extension workers.”

Cultural value of the community

HEWs are raised the strong cultural beliefs of the community as obstacle for their success in service provisions. The belief of women's in child immunization is one of the challenges that affect the full immunization of children (Wana, 2015). The following in-depth interview (HEW-2) supports this finding.

“While we are mobilizing the woman's to vaccinate their children they did not come to the health post. To solve this problem we made a discussion with women's and they believe that if the children are vaccinated they will be sick after vaccination and they think that children body growth will stop and are not strong enough. So, the awareness of women's in vaccination of child was low in the community.”

Feeding practice of pregnant women's

Pregnant women's are advised to feed egg and other special foods which are different from previous time. But women refuse the advice of HEWs. They think that if pregnant women feed egg the fetus will be overweight and it will be difficult to deliver. Pregnant women's are also engaged in heavy works during pregnancy. HEWs during their visit to households they are informing the pregnant to take rest and not engaging in heavy works.

Injection and the belief on evil eye and Measles

Many people are refusing to take medicine in terms of injection. They prefer the tablets medicines in the health post all the times, whereas the tablet medicines are not available. HEWs are mentioned that the preference of curative medicines in terms of tablets by people and the less availability of the drugs is the big worry in the health post.

The adaptations of open defecate

HEWs are advised to households to have toilets in the village in household level. At least in household level one toilet is mandatory to construct to be model household. But they tried to construct and they are not willing to use it. The

deep rooted habit of open defecate let down to use toilets in the community.

The attitude of women towards family planning

The deep rooted religious practice of women's that "using family planning is against the will of God" is still remains challenge to have widely using of family planning in the community (Wana, 2015). In the other case, preferring the short term family planning or the belief that using the long term family planning causes health problem is the other challenges. The polygamous marriage type in the community influences the utilization of family planning of women's. In the most polygamous households women's are not willing to use family planning. The reason is that wives are receiving their status based on the amount of children they have. The wife with more children is the women the most respectful by her husband and the women with less children is the wife with less respectful by her husband. The computations of wives to attract the husband by having more children or the need of women's to have more children affects the utilization of family planning.

The different beliefs on the causes of malaria

The lack of emphasis and awareness of malaria control and prevention in the community is challenging the service delivery of health extension workers. The causation of malaria are discusses drinking un-boiled milk, chewing maize stalk, sesame eating, mosquito bite, walking in rain time and cold air by the community. This influences to the using of bed nets.

Unwillingness of women's to referral health facilities (fear of operations and financial problems of women's)

According to the health extension workers when women's are referring to health centers they are not willing to go to the health centers. If they are referring to health centers they think that as they will operate to deliver and they fear the operation. The other factor is financial problem of households. The financially poor households cannot afford all the expenses in the health centers including for food and other expenses.

Poor communication system

The exchange of information from district health office to HEWs and to HDAs and to the local communities have still some gaps that needs to fill. HDA did not have telephone and they are living very far from the health post. Due to this reason HDAs are not receiving updated information from HEWs. Not only this, district health office are not forwarding updating information but they are caring more to reports from health posts.

Lacks of refresher courses

To update the knowledge of HEWs refresher courses are basic. To the reverse the HEWs are reported receiving neither refresher courses nor short training. But in order to have sustainable quality of service provision in health post the highly trained HEWs are the main actors (Marston *et al.*,

2013; Fantahun *et al.*, 2014). Refresher courses to HEWs on some HEP services are basic, especially on maternal and child health and diseases prevention and control. The solutions for updating the capacity of health extension workers are not meetings some refresher courses are the interests of health extension workers.

"I (HEW-2 In-depth interview) have been worked for 5 years as health extension worker in different T'abya of Asgeda Tsi'mbla district. After I complete grade 10, before I served as health extension workers in T'abya I have received short trainings on HEP service delivering. After that I didn't get any chance to update my knowledge on my jobs. This is creating challenges in my jobs to deliver services for the community."

Poor road network (geographical) - it is difficult to reach the households in the study area for supervision due to the geographically hilly areas. HEWs are not able to visit all households of the study area due to the factor that inaccessibility of road network. HEWs stated that most of the communities are living in the hilly, scattered and far from the health post. So, to regularly supervise these households is very difficult.

Poor relation with supervisors

According to the in-depth interview (HEW-12) with health extension workers, supervisors are not considering the challenge of HEWs while they are supervising the health post. Supervisors are not supervising helpfully. They are not motivating the success areas rather they are focusing on the weakness of health extension workers.

"Supervisors from higher health institutions are not supervising helpfully, rather they are finding errors and faults. Good performance of health extension workers are not recognized it as the good quality."

Lack of drug/curative/ supply (The need for curative drugs of the community vs. 75% supervision and 25% in the health post health policy) - the study area is identified as one of the most vulnerable area in the district health office but the drug supply to the health post is very low. According to the HEWs response, people in the area have high demand of curative drugs for malaria. But the availability of drugs in the health post is very low when it compare to the need of the community and the supply.

Lack of attentions to health agendas by T'abya administrative like other agendas

T'abya cabinets are not mobilizing the community. In addition to implementing all activities of the HEP, HEWs are expected to also do agricultural activities. The agendas of health are not recognizing equally like the agriculture agendas by T'abya administrative. The attention which is given by administrative for health is very low.

The attitude of the community towards health extension workers

In this study to identify the attitude of community towards health extension workers three issues are included. These are the communication skill of health extension workers, the quality of service delivered by health extension workers and the social behavior of health extension workers (Teklehaimanot et al., 2007; Wana, 2015).

Attitude of respondents towards HEWs communication skill

To identify the attitude of the community on health extension workers communication skill five scaled questions are asked to 263 respondents without any multiple responses.

Table 7, Q.1 shows that the totally participated 263 respondents are asked about their attitude towards the communication skill of HEWs are 176(66.92%) replied strongly agree and 87(33.08%) agree as HEWs communicate with local languages, and table-7,Q.2.shows 62(23.57%) of them are strongly agree, 170(64.64%) agree, 17(6.47%) undecided, 11(4.18%) disagree and 3(1.14%) strongly disagree as HEWs being female.Table-7,Q.3 shows about the complete explanations given by HEW and 88(33.46%) strongly agree, 156(59.32%) agree, 9(3.42%) undecided and 10(3.80%) disagree. Table-7, Q.4shows Health message transferring by the HEW were also asked to households replied that 33(12.55%) strongly agree, 201(76.43%) agree, 13(4.94%) undecided, 15(5.70%) disagree and 1(0.38%) strongly disagree.

The following key informant interview-3, 61 years old man supports the finding.

“HEWs are disseminating health messages in our churches every Sunday when peoples are come to

church. Among the messages, which are regularly told to the community by health, extension workers are to stop home delivery, controlling, and prevention of malaria. So, to broadcast the messages HEWs are used local language (Tigrigna) in the time of discussion with community and this helps to understand easily the messages.”

Attitude of respondents to HEWs quality of service provision

To identify the attitude of the community on health extension workers quality of service provision five scaled questions are asked to 263 respondents without any multiple responses.

Table-8,Q.1 shows about the quality of service provided by HEWs and 98(37.26%) replied strongly agree as HEW provided referral to health centers if there is health problem, 128(48.67%) agree, 15(5.71%) undecided, 17(6.46%) disagree,5(1.90) strongly disagree. Table-8, Q.2 shows, based on the referral result 40(15.21%) replied that strongly agree 23(8.75) agree, 21(7.99%) undecided, 149(56.65%) disagree, 30(11.41%) strongly disagree as HEWs follow up. Table-8, Q.3 shows the agreement of respondents on the skillfulness of HEWs are strongly agree 62(23.57%) strongly agree, 182(69.21%) agree, 8(3.04%) undecided, 11(4.18%) disagree as HEWs are skillful. Table-8, Q.4 shows as Participants replied that 39(14.82%) strongly agree, 82 agree, 13(4.95%) undecided, 129(49.05%) disagree on the HEWs skill is good to diagnose community health problems.

Table 7: Attitude of Respondents towards HEWs communication skill

	Strongly agree		Agree		Undecided		Disagreed		Strongly disagree	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Q.1. HEWs Communicate with local language always	176	66.92	87	33.08	-	-	-	-	-	-
Q.2. I Feel good on health extension worker being female.	62	23.57	170	64.64	17	6.47	11	4.18	3	1.14
Q.3. HEWs gives me a complete explanation about what they teach.	88	33.46	156	59.32	9	3.42	10	3.80	-	-
Q.4. HEWs able to transfer health messages in an understandable way.	33	12.55	201	76.43	13	4.94	15	5.70	1	0.38

Source: Own Field survey, (January, 2017)

Table 8: Attitude of Respondents towards HEWs quality of service provision

	Strongly agree		Agree		Undecided		Disagree		Strongly disagree	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Q.1.HEWsprovidesreferralservices to Health centers if there is health problem	98	37.26	128	48.67	15	5.71	17	6.46	5	1.90
Q.2.HEWs follow based on the referral result.	40	15.21	23	8.75	21	7.99	149	56.65	30	11.41
Q.3.What is your agreement on those HEWs is skillfulness	62	23.57	182	69.21	8	3.04	11	4.18	-	-
Q.4.HEWs skill is good to diagnose community health problems.	39	14.83	82	31.18	13	4.95	129	49.05	-	-
Q.5.HEWs effectively made discussions on community health problems	70	26.62	136	51.71	15	5.70	42	15.97	-	-
Q.6.HEWs available on her job, On Health post.	213	80.99	20	7.60	23	8.75	7	2.66	-	-
Q.7.The quality of services provided by the health extension workers is good overall.	24	9.13	201	76.43	6	2.28	21	7.98	11	4.18

Source: Own Field Survey, (January, 2017)

Table-8, Q.5 shows Respondents replied that as HEWs made discussions on community health problems 70(26.62%) strongly agree, 136(51.71%) agree, 15(5.70%) undecided, 42(15.97%) disagree. Table-8, Q.6 shows the availability of HEWs on her job, on Health post, by respondents is replied as 213(80.99%) strongly disagree 20(7.60%) agree, 23(8.75%) undecided, 7 (2.66%) disagree. Table-8, Q.7 shows the quality of services provided by the health extension workers is good overall 24(9.13%) strongly agree, 201(76.43%) agree, 6(2.28%) undecided, 21 (7.98%) disagree, and 11 (4.18%) strongly disagree. In this study to identify the attitude of the community towards the quality of service provisions of HEWs respondents are asked if HEWs provide referral services to Health centers if there is health problems, made effectively discussions on community health problems, available on her job, On Health post, the quality of services provided by the health extension workers is good overall which are answered positively. It shows that respondents had positive attitude toward HEWs quality of service delivered because of providing referral services in the time of health problems, effective discussion with community on health problems available on their work places. On the other side, respondents have negative attitude in the quality of service provision by health extension workers in the study area in the case of diagnosing community health problems and following up based on referral results. The following FGD-1, 43 years old man supports the finding.

“Health extension workers are not following up the referred patients from health posts. Once they refer him they are not caring about the situations. The referred patients are facing many challenges since they are from villages. So, health extension workers should follow up and support at referral places”

Attitude of respondents towards HEWs social behavior

To identify the attitude of the community on health extension workers social behavior five scaled questions are asked to 263 respondents without any multiple responses.

Table 9, Q.1 shows the Perception of households on the social behavior of HEWs are asked and 32(12.17%) are replied strongly agree as health extension workers are involving always during the happy and sad time of the community whiles the 127(48.29%) agree, undecided 38 (14.45%) disagree 52 (19.77%) and 14(5.32%) strongly disagree. Table-9, Q.2 shows on the attentiveness and caring of the HEW are also asked and replied that 50(19.01%) are strongly agree, 173(65.78%) agree, 4(1.52%) undecided 36(13.69%) disagree. Table-9, Q.3 shows 35(13.31%) strongly agreed as HEW are respecting their culture when they are treating and the remaining 179(68.06%) agree, 3(1.14%) undecided and 46(17.49%) disagree. Table-9, Q.4 shows the HEWs social interaction is high 49(18.63%) strongly agree, 128 (48.67%) agree, 14 (5.33%) undecided, 47(17.87 %) disagree, 25(9.50%) strongly disagree. Table-9, Q.5 shows HEWS conduct/ethics is good 33(12.55%) strongly agree, 145(55.13%) agree, 31(11.79%) undecided, 54(20.53%) disagree.

Table 9: Attitude of respondents towards HEWs social behavior

	Strongly agree		Agree		Undecided		Disagreed		Strongly disagree	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Q.1.HEWs Involved during happy and sad time of community	32	12.17	127	48.29	38	14.45	52	19.77	14	5.32
Q.2. HEWs are attentive and caring to me.	50	19.01	173	65.78	4	1.52	36	13.69	-	-
Q.3.HEWs respects my culture /Treated me with respect.	35	13.31	179	68.06	3	1.14	46	17.49	-	-
Q.4. HEWs social interaction is high	49	18.63	128	48.67	14	5.33	47	17.87	25	9.50
Q.5. HEWS conduct/ethics is good to me.	33	12.55	145	55.13	31	11.79	54	20.53	-	-

Source: Own Field Survey, (January, 2017)

In this study the attitude of the community towards HEWs social behavior were collected from 263 people asked by 5 successive questions. Respondents are asked to reply their agreement. Questions are asked about the involvement of HEWs during sad and happiness of the community and majority has positive responses. Respondent's response on the attentiveness and caring of HEWs 84.79% were positive. HEWs are also treating with respect to the respondent in the time of treatment. 81.46% were replied as the HEWs are treating with respect. About the level of social interaction of HEWs were also asked to respondents and majority 67.30% were rated as the HEWs social interaction is high. The HEWs conduct was also rated as very good by 67.68% of the respondents. This help to say majority of the respondent have positive attitude towards the social behavior of HEWs in the study area.

Summary

The study revealed that eleven health extension program components are available at household level. These are: malaria control and prevention, diarrhea control and prevention, immunization, family planning, ANC, referral for delivery, PNC, pit latrine construction, safe water use and health education initiated recently. The Low services utilization and health seeking behavior is observed with the less availability of health education and awareness creation at household level similarly associated with the frequency of HEWs visits to households.

HEWs emphasized in supervising specific HEP like malaria control and prevention, diarrhea control and prevention and construction of pit latrine construction followed by assisting

in the health post for the majority of the respondents for malaria treatment, immunization and family planning. The health post utilization of respondents and the visit of households by health extension workers are low. The availability of curative drugs, decision making, attitude of peoples towards the skill of HEWs and travel time to health institutions influences the health post utilization of peoples. HEWs have important role in providing care in the health post and supervising households on health services; these are malaria control and prevention, pit latrine construction, promoting safe water use, child immunization, family planning, ANC,PNC, referral for delivery, diarrhea treatment and control and health education and communication in study area.

There are challenges to the health extension workers in providing quality of service. Distance of health post and the scattered settlement of the community, lack of curative drugs in the health post, lack of skill competency, and the lack of time for visit households or a lot of works in the health post, difficult to reach areas (hilly areas), the strong cultural beliefs of the community and the lack of refresher course for HEWs are the major challenges which are reported by HEWs in the study area. Majority of the respondents who participated in this study have positive attitude towards HEWs service provisions, communication skills and social behaviors. The communication skill, quality of services provided and the social behavioral/conduct of HEWs influences the attitude of the community on health extension workers positively and negatively.

Reference

- Assfaw YT (2010) Determinants of antenatal care, Institutional delivery and skilled birth attendant utilization in Samre Saharti District, Tigray, Ethiopia (Master's thesis), Umeå International School of Public Health.
- Berhe F and Berhane Y (2014) Less than five diarrhea among model household and non-model households in Hawassa, South Ethiopia, *a comparative cross sectional community based survey*. Accessed 20/January/2017/
- Central Statistical Agency and ICF International: Ethiopia Demographic and Health Survey (2011). Addis Ababa, Ethiopia and Calverton, MD, USA: Central Statistical Agency and ICF International; 2012.
- Centre for National Health Development in Ethiopia (2010). Columbia University. Health Extension Program Evaluation: Rural Ethiopia Part – II HEW and Health post Performance Survey.
- Desta D, Alemayu T and Brahmī D (2012) Improving IUD uptake through engaging the health extension program, the experience of IPAS, Ethiopia.
- Fantahun M, Afework, Admassu K, Mekonnen K, Hagos S, Asegid M and Ahmed S (2014) Effect of an innovative community based health program on maternal health service utilization in north and south central Ethiopia, a community based cross sectional study. *Journal of Reproductive Health/Bloomberg School of Public Health*.
- Federal Ministry of Health (2007/08). Health Extension Program in Ethiopia Profile, Health Extension and Education Center, Ethiopia, Addis Ababa.
- Federal Ministry of Health (2010). Health Sector Development Program IV, 2010/11-2014/15 final draft. Ministry of Health, Addis Ababa.
- Federal Ministry of Health (2013). Health Sector Development Programme IV Annual Performance Report Version 1,
- Jackson R and Kilsby D (2015) We are dying while giving life. Gender and the role of Health Extension Workers in rural Ethiopia, Report to the Federal Ministry of Health Women and Youth Affairs Directorate and UN agencies in Ethiopia.
- Karim AM, Admassu K, Schellenberg J, Alemu H, Getachew N, Ameha A, Tadesse L, Betemariam W (2013) Effect of Ethiopia's health extension program on maternal and newborn health care practices in 101 rural districts: a dose-response study. *PLoS One* **8**(6): e65160.
- Koblinsky M, Tain F, Gaym A, Karim A, Carnell M, Tesfaye S (2010) Responding to the maternal health care challenge: The Ethiopian Health Extension Program. *Ethiopian Journal of Health Development* **24**(1).
- Last Ten Kilometers Project (2008). Rapid Appraisal of Health Extension Program, Country Report, Ethiopia.
- Last Ten Kilometers Project (2009). Baseline Household Health Survey: Amhara, Oromiya, SNNP and Tigray. JSI Research & Training, Inc., Addis Ababa, Ethiopia.
- Marston C, Renedo A, McGowan CR, Portela A (2013) Effects of community participation on improving uptake of skilled care for maternal and newborn health: a systematic review. *PLoS one* **8**(2): e55012.
- McAuliffe E and MacLachlan M (2005). Turning the Ebbing Tide: Knowledge Flows and Health in Low-income Countries. *Higher Education Policy*, 18: 231-242.
- Nigusse H, Eilish NcAuliffe and Malcolm Mac Lachlan (2007). Initial community perspectives on the Health Service Extension Program Welkait, Ethiopia, 24, August.
- Schaay N and Sanders D (2008). International Perspective on Primary Health Care over the Past 30 Years, In *Health Systems* trust edited by Barron P, Roma-Reardon J. Durban: *South African Health Review 2008* <http://www.hst.org.za/publications/841>.
- Teklehaimanot, Kitaw Y, G/yohannes A, Girma S, Seyoum A, Desta H, Ye-Ebiyo Y (2007). Study of working conditions of Health Extension Workers in Ethiopia. *Ethiopian J Health Dev.* 21 (3): 246-259.
- Tigray Health Bureau (2010) Tigray Health Profile, Mekelle, Ethiopia.
- Wana M (2015) Attitude and level of participation of households in health extension program at Nfas Silk Lafto, Adisababa city, Ethiopia.
- World Health Organization (1987) Declaration of Alma Ata: Report of the international conference on primary health care, Alma Atta, USSR.
- World Health Organization (2008) Working with Individuals, Families and Communities to Improve Maternal and Newborn Health, Geneva.
- Yamane T (1967) *Statistics; an Introductory analysis*, (2nd ed.), New York; Harper and Row.
- Yitayal M, Berhane Y, Worku A and Kebede Y (2014). Health extension program factors, frequency of household visits and being model households, improved utilization of basic health services in Ethiopia.