Int.J.Curr.Res.Aca.Rev.2020; 8(4): 71-85

EXCELLENT PUBLISHERS

International Journal of Current Research and Academic Review

ISSN: 2347-3215 (Online) Volume 8 Number 4 (April-2020)

Journal homepage: http://www.ijcrar.com

doi: https://doi.org/10.20546/ijcrar.2020.804.009

Households Level of Participation towards Health Extension Program (HEP) and Factors Affecting at Nefas Silk Lafto Sub-city, Addis Ababa, Ethiopia

Mesafint Wana[1*], Atinafu Nega[2] and Kassahun Tafesse Hidoto[3]

[1]*Department of Nursing, College of Health Sciences, Addis Ababa University, Addis Ababa, Ethiopia*
[2]*School of Nursing, College of Health Sciences and Medicine, Wolaita Sodo University, Sodo, Ethiopia*
[3]*School of Public Health, College of Health Sciences and Medicine, Wolaita Sodo University, Sodo, Ethiopia*

**Corresponding author*

Abstract

Health extension program (HEP) is an innovative community-based strategy to deliver preventive and promotive services. It brings community participation through the creation of behavioral change. It also improves the utilization of health services by bridging the gap between the community and health facilities. Although in Addis Ababa the urban health extension program was started in 2009, there are only limited studies on the program implementation and its expected benefits. This study aims to assess knowledge, attitude and participation level of households towards health extension programs and associated factors in Nefas Silk Lafto Sub-city, Addis Ababa, Ethiopia. Community-based cross-sectional study design was used with the sample size of 423 households that were included by using a systematic sampling method. A structured pre-tested questionnaire was used to collect data. Frequencies, proportions, and logistic regression were used for the description of the study population, to determine dependent and independent variables association strength and the relative effect of independent variables on dependent variables. Participation level of households in health extension program was 42% (95% C.I= 0.37-0.47). The positive attitude towards HEP of households (HHs); satisfaction on HEP services; communication skill of urban health extension professionals (UHEPs); believing UHEPs skillful and believing they able to teach reasonably were associated with participation level of households in HEP [AOR (95% C.I): 2.15(1.62-11.54), 1.08(1.32-9.38), 2.78(1.09-18.06), and 2.67(1.01-7.09)] respectively. The participation level of households in the health extension program is low. The participation level is associated with attitude on the change HEP implementation brought; satisfaction on HEP services; believing UHEPs skillful and believing them able to teach reasonably. Strong advocacy on HEP and continuous improvement of UHEPs capacity are important.

Article Info

Accepted: 04 March 2020
Available Online: 20 April 2020

Keywords

Health extension program, Urban Health Extension Professionals, level of Participation, Nefas Silk Lafto sub-city, Addis Ababa, Ethiopia

Introduction

Globally many countries, particularly developing countries, are striving to achieve universal health coverage from the start of the "Health for All" movement of 1977 by the World Health Organization (WHO) or the Almata declaration (1, 2). Establishing an effective and responsive health delivery system is an integral part of the overall development which leads to reduce poverty and achieve economic growth and development (3). Moreover, primary health care services are fundamental to improving health and health equity, particularly in the context of low and middle-income households. (4).

Many low-income countries in Sub-Saharan Africa and others suffer from a shortage of health services. Like any low-income country; Ethiopia experiences a heavy burden of disease mainly attributed to communicable diseases and nutritional deficiencies. The country ranked second as the most populous nation in Africa with an estimated population of 94 million; of which more than 85% live rural areas (1).

Although it has many challenges still to be addressed; Ethiopia is fast registering impressive successes in extending affordable primary health-care services across the country. These achievements are largely attributable to the health extension program (HEP) which has been implemented since 2003, and through which the country aims at achieving universal access to primary health care (2-3).

Even though it is not easy to measure contributions in health care simply to the contribution of the health extension program, till 2011, under-five mortality decreased from 123 per 1,000 live births to 88 per 1,000 live births; the contraceptive prevalence rate increased from 15 percent to 29 percent; stunting in under-five children declined from 52 percent to 44 percent; the prevalence of anemia among women decreased from 27 percent to 17 percent; the total fertility rate decreased from 5.4 to 4.8; and use of insecticide-treated nets increased from 1.3 percent to 42 percent (6,7,8).

Households are organized into the health development army (HDA) for participatory learning and action meetings to actively engage the community in the health extension program (4). The desired result of the program is a community practicing through awareness creation, behavioral change, community organization and mobilization and producing good health being (3).

The urban health extension professionals work 75% of their time visiting their outreach activities in the community. In addition to awareness creation, the household members in the community are supported regularly by the urban health extension professionals and supervisors in order to implement the packages practically. The households that practiced 75% and above of the packages were certified as a model household and get graduated (9, 10, 11).

Despite the urban health extension program providing significant improvement in primary health care issues, there are a lot of challenges regarding the implementation the programs packages (12, 11). To strengthen the health extension program in the urban area of Ethiopia, it requires a timely evaluation of the progress of the level of practice and determinants (13, 14). However, so far there is limited evidence showing the gap between the urban health extension actual level of practices and the expected in the capital city of Ethiopia (13, 15). Therefore; this study is to help improvement of public health through studying level of urban health extension package practice of the community and affecting factors. Besides, the study can provide an relevant information for strengthening urban health extension program implementation through further strong studies and monitoring, better planning, and as well as for policymakers.

Materials and Methods

Study Design

Community-based cross-sectional study design was used to assess household participation level in Nefas Silk Lafto sub-city, Addis Ababa, Ethiopia.

Setting

The Nefas Silk Lafto sub-city has 12 districts (woreda) where there were about 139 administrative Kebeles with one health post in each kebeles. The study was conducted from February to March, 2017/18.

Participants

The eligibility criteria were all households in the study area and resided for more than six months at the time of data collection. Four Woredas were selected by the lottery method and the total sample size was distributed proportionately to each Woreda. The respondents from each Woreda were selected by systematic random sampling (SRS) method.

Variables

The outcome variable was the participation level of households on the health extension program packages and the predictor variables assessed were include the attitude towards health extension program and health extension workers in the community-related.

Participated

A household reported >=75% (11/15 and more of UHE packages) practiced at the time of data collection.

Participation level

The extent to which the household was working in collaboration with and through the group to support HEP implementation in different means.

Attitude

Households think and perceive in the implementation of health extension program assessed according to liker scale of measurement.

Households

In this study, households were people residing in urban Woreda or the smallest administrative unit in Addis Ababa.

Knowledge

Knowledge responded 60% of the questions correctly about the urban health extension program.

Data source/Measurement

A structured questionnaire was designed and first translated to Amharic and back-translated to English by different individuals to check consistency and conceptual equivalence. Pretesting of the questionnaire for clarity and ease of administration was done in non-surveyed households. Data collectors and supervisors were selected with previous experience of data collection and training was given for five days on the data collection technique.

Bias

To control the data in quality; data collectors were trained before data collection and regular supervision were done during the fieldwork. Close supervision of data collection was done by supervisors and principal investigators. All filled questionnaires were reviewed at the end of the day by the supervisor and investigator.

Study size

Using single population proportion formula assumptions of 50% proportion, 5% marginal error 95% confidence interval and considering a 10% non-response rate the final sample size was determined to be 423 households.

Statistical methods

Each questionnaire was screened, cleaned and data were entered using SPSS (statistical packages of social science) version 20. The proportion was used for the description of the study population. Cross-tabulation was also computed using dependent and independent variables to determine the proportions of respondents and the existence of an association between independent and dependent variables. Some selected socio-demographic characteristics of household respondent's odds ratio and adjusted odds ratios with their 95% confidence interval were calculated to assess the strength of associations between variables and see the relative effect of independent variables on a dependent variable.

Ethical consideration

The necessary permission to undertake the study was obtained from the Ethical Review Committee of Addis Ababa University, College of Health Science School of public health (ERCAAU127/05 issued on date 12/06/2013). The letter obtained from Addis Ababa University was submitted to the sub-city and the respective Kebele. All participants were informed about the purpose of the study, confidentiality of the information, and the right not to be participated or withdraw at any time. Then written consent was obtained from each respondent.

Results and Discussions

Socio-demographic characteristics of respondents

Out of 423 households included in the study, 400 households were participated in this study, giving a response rate of 94.6%. Of the total study subjects, 373 (93.2%) were females. The mean age of the respondent was 37.6 with SD ±13. Of the respondents, majority 303 (75.7%) were married, whereas 49(12.3%) single and 48(12%) either widowed or divorced. The mean family size of the household was 4.45. The majority of the respondents, 288 (72%) were Orthodox religion followers. Nearly half of the households 220(55.4%) were privately owned the house live in. About one hundred sixteen (29.1%) of the respondents attended primary (1-8) education and ninety-eight (24.6%) of the respondents attended secondary (9-12) education. One hundred fifty-one (37.8%) of households were with an estimated monthly income of below 1,000 birr (Table 1).

Awareness of households on health extension program

Out of 400 respondents, about 372 (93%) of households were aware of the health extension program being implemented in their area from different information means. A majorty 252 (78%) of HHs were heard about HEP from urban health extension professional and 88(27.2%) from radio/television and 45(13.8%) from other information sources.

Knowledge of households towards health extension program and its packages

Household respondents were asked on knowledge questions about the health extension program, where 345 (86%) knew about the health extension program and packages implemented in the city. Among the program packages the respondents mentioned as solid and liquid waste disposal package (83.1%), toilet/excreta handling package (77.4%), maternal and child health packages (69.1%). Health extension program packages such as prevention of accidents, adolescent and reproductive health and nutrition packages were given the least mentioned, even though these are serious health problems in urban areas.

Households' attitude towards health extension program

Among household respondents who knew about the health extension program (HEP), being happy in health extension program implementation were 179(51.9%) and those who believe that they are benefited from the health extension program were 171(50.4%). Household respondents whose expectation from the health extension programs can address their need were 66(16.5%) and none of their expectations from the program addressed was 122(30.6%). Households who believe HEP increased their health-seeking behavior were about 179(51.9%) and those who believe there were changes observed after HEP started to be implemented were 138(40.2%). Overall about 179(51.9%) of households were satisfied by HEP being implemented in their area (Table 2).

Households' attitude towards urban health extension professionals job-related behavior

Out of 400 households participated in the study, 311(90.1%) had a positive attitude towards UHEP being female. HH respondents/members who had fever and diarrhea six months back were 68(20.7%) and from this 43(63.4%) households did not consult UHEP and their preference was health center (45.5%) and private clinic/pharmacy (17.9%) (Table 3).

Households' attitude on HEW job Competence and quality of service provision

About 96(27.2%) of HHs believe that UHEPs' skill to diagnose their health problem were poor. About 113(32.8%) of households perceive the quality of service provided by UHEPs were poor. HHs who were not satisfied by the service provided by UHEPs were 177(51.3%) and 68(38.6%) households stated UHEPs do not come always and follow us (Table 4).

Households' attitude on health extension worker communication skill and social behavior

From HHs participated in the study which believed UHEP give complete explanation, understandably transfer health message, respecting others culture during her teaching were 193(55.9%), 183(53%), and 291(84.3%) respectively and households who didn't think that HEWs not attentive and caring were 176(51%) (Table 5).

The participation level of households in a health extension program

Out of 345 households who knew about HEP implementation in their area, 145(42%) of households participated in health extension program implementation in different means. HHs who participated in need assessment was 158(69.3%) and 118(51.8%) of HHs participated in problem identification. From the study participants who had participated in planning based on the identified and prioritized problem, decision making, resource mobilization, and evaluation of the program were 107(46.9%), 81(35.5%),145(63.6%) and 93(40.8%) respectively (Table 5).

Predictors of the participation level of households in a health extension program

Socio-demographic factors for the participation of households in a health extension program

Among important variables which were associated in bivariate analysis with the practice of households in health extension program; in multivariate analysis results of p-value≤0.05 considered significant and it showed that

except age; the other predictors were not significantly associated with participation level (Table 6 and Fig. 1).

Association between households' attitude on health extension program and participation level

As indicated in Table 6, Among other variables households satisfied on the health extension program, households who were with positive attitude towards health extension program (COR (95% C.I=1.76(1.14-2.72) and 2.74(1.75-4.28), AOR (95% C.I)=1.08(1.32-9.38) and 2.15(1.62-11.54)) were associated with participation level in health extension program. But increased of household awareness on health, an increase of household's health-seeking behavior and being model family were not significantly associated with participation level.

Table.1 Distribution of socio-demographic characteristics of respondents in Nefas Silk Lafto Sub-city, Addis Ababa, Ethiopia, March-April, 2015

Variables	Number	Percent(100%)
Family size		
≤4	224	56
>4	176	44
Total	**400**	**100**
Age group		
18-28 years	113	28.3
29-38 years	139	34.8
39-48 years	74	18.5
≥49 years	74	18.5
Total	**400**	**100**
Religion		
Orthodox	288	72.0
Protestant	45	11.3
Muslim	63	15.8
Others (catholic)	4	1.0
Total	**400**	**100**
Educational status		
Illiterate	65	16.3
Read and write	53	13.3
Primary school (1-8)	116	29.0
Secondary school (9-12)	98	24.5
Education above Certificate	68	17.0
Total	**400**	**100**
Occupation		
House wife	215	53.8
Those have work	175	43.8
Retired	10	2.5
Total	**400**	**100**
Estimated monthly income		
Below1000 birr	151	37.8
Between1001and 1900	70	17.5
Between1901 and 2800	83	20.8
Above2801	96	24
Total	**400**	**100**

Table.2 Households' Awareness and Attitude towards health extension program in Nefas Silk Lafto Sub-city, Addis Ababa, March-April, 2015

Variables	Number	Percent
Heard of about HEP		
Yes	372	93
No	28	7
Total	**400**	**100.0**
Know about HEP		
Yes	345	86
No	55	14
Total	**400**	**100.0**
Graduated as model family		
Yes	148	42.9
No	252	57.1
Total	**400**	**100.0**
Duration of HEW support to model family		
Weekly	15	10.2
Twice a month	30	20.4
Monthly	50	34.0
Quarterly	25	17.0
Twice in a year	17	11.6
Do not support	11	6.0
Total	**148**	**100.0**
Being happy in the HEP		
Yes	179	51.9
No	166	48.1
Total	**345**	**100**
Being benefited from HEP		
Yes	171	50.4
No	174	49.6
Total	**345**	**100.0**
HEP addressed health information need		
All my health information needs are addressed	66	16.5
Most my health information needs are addressed	84	21.1
Only some of my health information needs are addressed	79	19.5
None of my health information needs are addressed	122	30.6
Don't know	49	12.3
Total	**400**	**100.0**
HEP increased awareness about health		
Yes	159	53.9
No	186	46.1
Total	**345**	**100.0**
HEP increased health seeking behavior		
Yes	179	51.9
No	166	48.1
Total	**345**	**100.0**
Changes observed after HEP packages started to implement		
Yes	140	40.2
No	205	59.8
Total	**345**	**100.0**
HHs satisfied with the services provided by the HEP		
Yes	179	51.9
No	166	48.1
Total	**345**	**100.0**

Table.3 Attitudes of households on HEW being female and contacting during unhealthy conditions in Nefas Silk Lafto Sub-city, Addis Ababa, March-April, 2015

Variables	Number	percent
Feeling good on HEW being female		
Yes	311	90.1
No	34	9.9
Total	**345**	**100.0**
An individual with fever and diarrhea		
Yes	68	19.7
No	277	80.3
Total	**345**	**100.0**
An individual consulted		
HEW	23	34.8
HC professional	32	45.5
Private clinic/ pharmacy	13	17.9
Total	**68**	**100.0**
HEW provide referral services to health center		
Yes	17	73.9
No	6	26.1
Total	**23**	**100.0**
HEW follow up based on the referral result		
Yes	7	41.2
No	10	58.8
Total	**17**	**100.0**

Table.4 Attitudes of HH's on HEW job Competence and service provision in Nefas Silk Lafto Sub city, Addis Ababa, March-April, 2015

Variables	Number	Percent
HEW is skillful		
Yes	187	54.2
No	158	45.8
HEW skill to diagnose community health problem		
Very good	74	21.4
Good	141	40.9
Fair	34	9.9
Poor	94	27.2
Very poor	2	0.6
Availability of HEW on her job		
Always	124	35.9
Occasionally	65	18.8
Rarely	89	25.8
Have not seen in the area	67	19.4
Quality of services provided by the HEW		
Very good	55	15.9
Good	116	33.6
Fair	61	17.7
Poor	101	29.3
Very poor	12	3.5
HHs satisfaction on HEW service provision		
Yes	168	48.7
No	177	51.3
Reasons of not satisfied on HEW service provision		
HEW doesn't come always	68	38.6
Didn't understand HEW teaching	8	4.5
HEW is not confident enough	15	8.5
The change is not enough	49	27.8
Time not comfortable to learn	36	20.5

Table.5 Participation level of HHs in HEP in relation to selected socio-demographic characteristics in Nefas Silk Lafto sub-city, Addis Ababa, March-April, 2015

Variables	Participation level		p-value	COR(95% C.I)	AOR(95% C.I)
	Yes (%)	No (%)			
Age group					
18-28	46(31.7)	49(24.5)	0.003	2.816(1.407-5.639)	3.073(1.160-8.141)**
29-38	58(40)	63(31.5)	0.003	2.762(1.415-5.391)	2.606(1.059-6.415)**
39-48	25(17.2)	40(20)	0.103	1.875(0.881-3.989)	1.890(0.718-4.974)
49+	16(11)	48(24)		1	
Family size					
≤4	90(62.1)	99(49.5)	0.021	1.669(1.08-2.58)	1.318(0.732-2.373)
>4	55(37.9)	101(50.5)		1	
Education status					
Illiterate	22(15.2)	32(16)	0.280	0.665(0.318-1.394)	0.705(0.245-2.023)
Read and write	20(13.8)	28(14)	0.342	0.691(0.323-1.482)	0.248(0.441-3.532)
Primary(1-8)	35(24.1)	61(30.5)	0.077	0.555(0.289-1.065)	0.429(0.173-1.061)
Secondary(9-12)	37(25.5)	49(24.5)	0.351	0.731(0.378-1.412)	0.714(0.313-1.630)
Education above certificate	31(21.4)	30(15)		1	
Income level					
Below1000 birr	40(27.8)	82(41)	0.071	0.591(0.333-1.047)	0.854(0.389-1.877)
Between1001-1900 birr	35(24.3)	27(13.5)	0.181	1.569(0.810-3.038)	1.922(0.788-4.685)
Between 1901- 2800 birr	31(21.5)	45(22.5)	0.571	0.834(0.445-1.562)	0.826(0.375-1.821)
Above2801 birr	38(26.4)	46(23)		1	

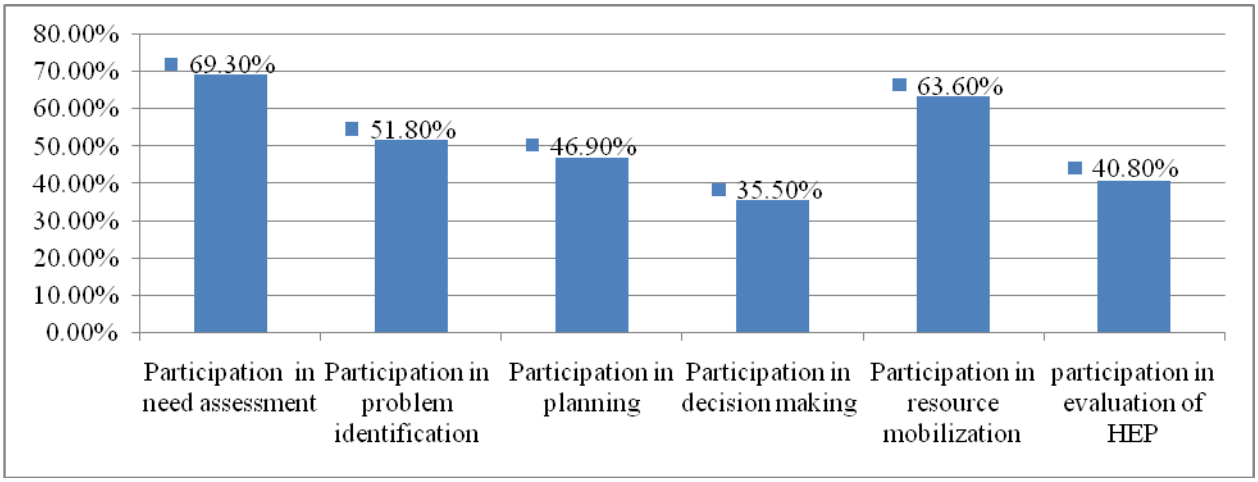
** Represented are P-value less than 0.05 and considered as significantly associated with the outcome variable

Table.6 Association of Participation level of HHs in HEP based on their attitude in the health extension program Nefas Silk Lafto sub-city, Addis Ababa, March-April, 2015

Variables	Participation level		p-value	COR(95% C.I)	AOR(95%C.I)
	Yes (%)	No (%)			
HEP increased awareness on health information					
Yes	82(56.6)	77(38.5)	0.001	2.079(1.346-3.211)	4.832(0.710-32.862) **
No	63(43.4)	123(61.5)		1	
Accepted attitude status towards UHEP					
Yes	88(60.7)	91(45.5)	0.006	2.74(1.750-2.712)	1.98(1.324-9.381)
No	57(39.3)	109(54.5)		1	
Changes observed after HEP implementation					
Yes	78(54.2)	60(30.2)	0.000	2.738(1.752-4.278)	0.150(0.042-3.539)
No	66(45.8)	139(69.8)		1	
Satisfaction on HEP					
Yes	87(60)	92(46)	0.010	1.76(1.142-2.716)	1.76(1.322-9.38)**
No	58(40)	108(54)		1	
HEW give complete explanation during teaching					
Yes	113(77.9)	80(40)	0.000	5.297(3.265-8.593)	0.062(0.006-0.636)**
No	32(22.1)	120(60)		1	
HEW is attentive and caring					
Yes	91(62.8)	78(39)	0.000	2.636(1.697(-4.095)	
No	54(37.2)	122(61)		1	
HEW transfer health messages in an understandable way					
Yes	106(73.1)	77(38.5)	0.000	3.87(2.450-6.091)	2.67(1.013-7.731) **
No	39(26.9)	123(61.5)		1	
HEW is skillful					
Yes	114(78.6)	73(36.5)	0.000	6.398(3.918-10.447)	2.78(1.092-18.241)**
No	31(21.4)	127(63.5)		1	

** Represented are P-value less than 0.05 and considered as significantly associated with the outcome variable

Figure.1 Type and extent of household's participation in HEP, Nefas Silk Lafto Sub- city, Addis Ababa, Ethiopia, March-April, 2015



Association between households' attitude on urban health extension professionals and participation level in the health extension program

Adjusting variables which have p-value ≤0.1 revealed of households' perceived that UHEPs' skillfulness and able to teach households reasonably (COR (95% C.I)= 6.40(3.92-10.45), AOR (95% C.I)= 2.78(1.09- 18.06), (COR (95% C.I)= 3.87(2.46-6.09) and AOR (95% C.I) = 2.67(1.01-7.09)) respectively were significantly associated with household's participation level in health extension program (Table 6).

This study aimed to assess the household's attitude and their participation level in UHEP; it was found that the household's participation level in UHEP is 42%. This finding was higher than a study conducted three years ago in Gindeberet in which the proportion of utilization of health extension was found to be 39% with 95% CI of (4.0, 12.0%) (16). This better practice level might be due to the better level of economic status of the urban residents', higher educational status and greater awareness among the urban residents than the rural population, higher commitment of health extension workers and supervisors or difference in the study area as well time. But much lower than the national Ethiopian ministry of health expected level to practice urban health extension program (17). Which might be the challenges of households to accept the UHEPs.

Among urban health extension packages households were mainly participating in environmental health activities like making sanitation campaigns, contributing money to build liquid waste disposal systems (sewerage system) and the like. It is similar with other studies conducted in rural parts of Ethiopia and other developing countries (8). This might be due to strong awareness of the environmental hygiene and sanitation and probably greater attention given within urban area. Moreover, it could be due to the major governmental concern in order to create citizens who are more informed about proper health care regarding prevention of major communicable diseases such as thyroid fever and diarrheal diseases.

Ninety three present of households aware of the health extension programs. This was consistent with the guideline of the Ministry of Health in the urban health extension program manual (17). This could be due to effective planning, organization and implementation of the household owners and good relationship with the health extension workers with the community. Further, this might be due to the presence of strong connections between governmental and nongovernmental organizations though providing of training to the community to create a knowledgeable society. But as it is stated by the National Urban Health Extension Package Implementation Guide Line, let alone not to be aware of the program, it was expected that within three years of implementation all of the households should become graduated as model family and practice HEP packages but the participation of households in the implementation of the program is very low.

Implementations of HEP in Addis Ababa was started 5 years back and only about 42.4% of households responded in this study were graduated as model families. Household graduation status (being model households) had a positive significant association with

contraceptive utilization in the community (5). So, increasing the number of model families increases the utilization of services. It is good that eight in ten and above (86%) of households knew about the health extension program which is good to bring households to their full participation in the program. Study on HEP factors, frequency of household visits and being model households, improved utilization of basic health services in Ethiopia and assessment done in Addis Ababa health office in collaboration with Walta Information Media Center on community's suggestion towards HEP package implementation indicated similar result (18).

The knowledge to health extension program is increased may be due to the reason that HHs grouped into groups of 30 as health development army (HDA) in which this 30 HHs grouped into groups of 5 and each group has leader who graduated as model family or those households who have better knowledge on the health extension program become leader of the team and differentiate those households who are not included in the program, those who are pregnant, those who have children not getting vaccination and facilitate environmental activities like prepare sanitation campaign and others, which is not functional in all areas of the city but households have chance to know about HEP and participate in the program via the leader beside HEW (17).

Households exposure to health extension program packages was high in environmental health packages and eight in ten and above (83.1%) mentioned solid and liquid waste disposal management package in which study on health extension program factors, frequency of household visits and being model households, improved utilization of basic health services in Ethiopia and new study on Strengthening Ethiopia's Urban Health Program (SEUHP) revealed familiarity of the package (67.2% and 61% respectively(6,7) and the difference may be due to the sampling and other factors. Seven in ten and above (77.4%) of HHs mentioned excreta disposal method package and maternal and child health package 69.1%. Some packages got less attention even though these are serious health problems in urban area such as accident control, insect control, adolescent and reproductive health package, nutrition package (20.2%, 22.6%,32.3%,38.9%) respectively which is similar in the study health extension program factors, frequency of household visits and being model households, improved utilization of basic health services in Ethiopia(6). Of the total respondents, 519 (82.6%) and 512 (81.2%) of the study participants had personal and environmental hygiene practice and used proper solid and liquid management respectively. This result was consistent with a study conducted on Strengthening Ethiopia‟s Urban Health Program (SEUHP) by John Snow Inc, Addis Ababa, Ethiopia, on the situational analysis of urban sanitation and waste management (15). However, services of the urban health extension like first aid skills, malaria prevention and control, non-communicable diseases prevention and control and mental health care were services less utilized [122 (19.4%), 126 (20.1%), 133 (21.2%) 244 (38.5)], respectively. This may be due to lack of attention or disinterest in the packages. The above figures are lower than related studies in Hadiya zone towns in exposure to urban health extension environmental health packages (21) which may be due to population living style, societal set up which may include rural areas and other reasons. About 311(90.1%) of the households had a positive attitude towards HEWs being female in which the involvement of female HEWs in the program was preferred on the grounds of a degree of closeness, easier disclosure of personal problems and cultural norms. This might reflect the fact that most mothers tend to have a better relationship with HEWs. Despite, the good interpersonal relationship, HEWs had less acceptance and less trust in Jimma zone, Ethiopia (1) and study in Hadiya zone town which is almost similar proportion, 373(90.3%).

In this study, about 49.1% of households were not happy in the HEP implementation and this finding is supported by new study on strengthening Ethiopia's urban health extension program 46.1% of households had unfavorable attitudes about solid and liquid waste management and unhappy on the practice in their neighborhood (23) and 49.6% of HHs in this study believe that they were not benefited from the program. About 46.1% of households in this study believed that their awareness about health were not increased after HEP started to implement and 48.1% of HHs believe their health-seeking behavior was not changed which has discrepancy to related study in Debretabor town (23) and Addis Ababa health office assessment in collaboration with Walta Information Media Center on community's suggestion on HEP package implementation showed positive attitude on the benefit of the program two years back and the discrepancy might be due to the time gap which shows HHs attitude increased a lot.

HEP was designed and implemented in recognition of the fact that the major factor underlying the poor health status of the country's population is the lack of empowerment of households and communities to

promote health and prevent disease (21**)** and in line with this, out of 400 HHs responded in this study about 59.8% of households did not believe that there were changes observed after HEP is started to implement in their area compared to the situation before. There were slight changes observed after the implementation of HEP in environmental sanitation but a lot of households are disposing solid and liquid waste here and there and people are urinating to the side of the road. This study is supported by a new study on Strengthening Ethiopia's Urban Health Program (SEUHP) including Addis Ababa 63.7% and 49.8% of households have poor knowledge of solid waste disposal management and human waste disposal management respectively **(**20**).**

Still, there were mothers giving birth in their home but it was decreased a lot after the implementation of the program where mothers were connected to health facilities via the HEW referral system and give birth in the health institution whose cumulative effect decreased maternal death in the country. About 51.9% of HH's were satisfied by the service provided in the health extension program. This figure is lower than related studies in the Hadiya zone and Jimma zone (67.4%, 69.9%) respectively. The difference may be due to variation in societal setup, living style of the people, diversity of the population and other reasons. This study is supported by a current study on Strengthening Ethiopia's Urban Health Program (SEUHP) about 44.7% households had unfavorable attitudes about current neighborhood practices in sanitation and FGD participants in Arada sub-city in Addis Ababa agreed that most people defecate and urinate openly, even though they have good awareness (20).

HEP in Ethiopia has shown significant positive impacts on the health of communities, in disease prevention, family health, environmental hygiene and sanitation through community participation strategy to change the community's norms and values regarding health problems being addressed (25). Health is a product that can be produced by individuals and it is believed that HEP empowers communities to make informed decisions about their health by equipping them with appropriate skills and knowledge through successful community mobilization and active community participation (23). Out of the households responded in this study about 42% participated in the program implementation at different times and means which is very low compared to HSDP 2010-2015 expectation. Household's participation was based on their attitude to the program and those who were satisfied with the program and observing the change after HEP started to implement participated most. There is overwhelming evidence that community participation in the design and implementation of health programs and inter-sectoral activities have a significant impact on success and sustainability (25).

Households level of participation in HEP is associated with the age of respondents in which HHs with lower age were more likely to participate in HEP. This may help to say lower age households are early adopters and easily understand the importance and benefit of the program and participate in the program than others. HHs attitude in observing the change is significantly associated with participation level. The participation level of HHs was increased in those who observed the change.

In this study, 51.9% of households were satisfied by the health extension program and 58% of households were not participating in HEP. The related study in Hadiya zone town shown however 67.4% of communities was satisfied with overall HEP service, 61.4% of communities were not participating in the planning and implementation of HEP. The discrepancy may be due to the difference in expectations of the communities and mobilization skills of HEWs. Household participation in HEP was associated with their satisfaction with the program. Community participates in the community program if the community takes ownership and gets benefited from the program (27).

This study showed the household level of participation in HEP is associated with HEWs communication skills. HHs were asked whether HEWs were attentive, appeared to enjoy caring, seemed to give complete explanations, appeared to be skillful, understandably explained things revealed ranging between 49-55.9% had positive attitude and evaluation cared out by Center for National Health Development in Ethiopia, Columbia University ranged between 82.5 to 91.2% answered these questions positively. The discrepancy is the result of the evaluation place difference (rural vs. urban). The satisfaction of HHs in HEW's service had an association with participation level (27).

Conclusion and recommendation of the studies are as follows:

The study provided important information regarding the status of participation level of urban health extension services and associated factors. The Participation level of households in the health extension program is low. The level participation is associated with attitude on the

change HEP implementation brought; satisfaction on HEP services; communication skill of HEWs; believing HEWs skillful and satisfaction of on HEWs service provision. Strong advocacy on HEP and continuous improvement of HEWs capacity are important.

Acknowledgments

We would like to express our deepest gratitude to instructors particularly to Dr. Mitike Molla and administrative staff in the school of public health, Addis Ababa for their assistance and encouragement throughout our study period.

We would also like to thank Nefas Silk Lafto sub-city health office, Woreda health offices of their encouragement and support in facilitating this work. We also appreciate and thank Dr. Moges Ayele institute of psychology department head, Addis Ababa University, Mr. Godana Menta English language instructor in Bule Hora University and Zelalem Daniel English language teacher in their unlimited support and contribution in this work.

Data availability – available on request

Conflict of interest – all authors declare that there is no conflict of interest

Source of funding - None

Contribution of the authors – all authors actively participated from the concept generation to final manuscript preparation as well as review of the manuscript.

References

1. Lucy Mize, R.M., Mirgissa Kaba, Michael Dejene, and Kuleni Berhanu, *USAID/Ethiopia: End of project evaluation for the urban health extension program*. 2012, USAID: 1725 Eye Street NW, Suite 300 Washington, DC 20006. p. 76.
2. Wakabi, W., *Extension workers drive Ethiopia's primary health care.* 2008, the Lancet. 372(9642): p. 880.
3. (FMOH), F.M.O.H., *Health Sector Development Program IV*. 2010, FMOH. p. 137.
4. Teklehaimanot, A., *et al., Study of the working conditions of health extension workers in Ethiopia.* Ethiop J Health Dev, 2007. 21.
5. Yitayal, M., *et al., The community-based Health Extension Program significantly improved contraceptive utilization in West Gojjam Zone, Ethiopia.* J Multidiscip Healthc, 2014. 7: p. 201-8.
6. Workie NW, Ramana GN. The health extension program in Ethiopia. 2013.
7. Jackson R, Tesfay FH, Godefay H, Gebrehiwot TG. Health Extension Workers' and Mothers' Attitudes to Maternal Health Service Utilization and Acceptance in Adwa Woreda, Tigray Region, Ethiopia. PLoS One. 2016; 11(3): e0150747.
8. Gebreegziabher EA, Astawesegn FH, Anjulo AA, Kerie MW. Urban Health Extension Services Utilization in Bishoftu Town, Oromia Regional State, Central Ethiopia. BMC Health Services Res. 2017; 17(1): 195.
9. Yitayal M, Berhane Y, Worku A, Kebede Y. The community-based Health extension Program significantly improved contraceptive utilization in West Gojjam Zone, Ethiopia. J Multidisciplinary Healthcare. 2014; 7: 201.
10. Kok MC, Kea AZ, Datiko DG, Broerse JE, Dieleman M, Taegtmeyer M, *et al.*, A qualitative assessment of health extension workers‟ relationships with the community and health sector in Ethiopia: opportunities for enhancing maternal health performance. Human Resources Health. 2015;13(1):80.
11. Medhanyie A, Spigt M, Kifle Y, Schaay N, Sanders D, Blanco R, *et al.*, The role of health extension workers in improving utilization of maternal health services in rural areas in Ethiopia: a cross sectional study. BMC Health Services Res. 2012; 12(1): 352.
12. Banteyerga H. Ethiopia‟s health extension program: improving health through community involvement. MEDICC Rev. 2011; 13(3): 46-9.
13. San Sebastian M, Lemma H. Efficiency of the health extension programme in Tigray, Ethiopia: a data envelopment analysis. BMC International Health Human Rights. 2010; 10(1): 16.
14. Bekele A, Kefale M, Tadesse M. Preliminary assessment of the implementation of the health services extension program: the case of southern Ethiopia. Ethiopian J Health Develop (EJHD). 2016; 22(3):302-5.
15. Teklehaimanot HD, Teklehaimanot A. Human resource development for a community-based health extension program: a case study from

Ethiopia. Human Resources Health. 2013;11(1):39.

16. Kelbessa Z, Baraki N, Egata G. Level of health extension service utilization and associated factors among community in Abuna Gindeberet District, West Shoa Zone, Oromia Regional State, Ethiopia. BMC Health Services Res. 2014; 14(1):324.
17. Tesfa B, Jibat N. Health Extension Program as innovative health care service: the socio-cultural factors affecting its implementation in Jimma Zone, South Western Oromia. Int J Sociol Anthropol. 2014;6(8):235-45.
18. Yitayal, M., *et al., Health extension program factors, frequency of household visits and being model households, improved utilization of basic health services in Ethiopia.* BMC Health Serv Res, 2014. 14: p. 156.
19. Yitayal, M., *et al., Health extension program factors, frequency of household visits and being model households, improved utilization of basic health services in Ethiopia.* BMC Health Serv Res, 2014. 14: p. 156.
20. Wakgari Deressa, T.A., Tseganeh Demissie, Andenet Haile, Wahid Manaye, *Strengthening Ethiopia's Urban Health Program (SEUHP) Formative Behavior Change Communication Assessment Report*. 2005, John Snow Inc: Addis Abeba. p. 158.
21. Sibamo, E.L. and T.M. Berheto, *Community satisfaction with the urban health extension service in South Ethiopia and associated factors.* BMC Health Serv Res, 2015. 15: p. 160.
22. Birhanu, Z., *et al., Mothers' experiences and satisfactions with health extension program in Jimma zone, Ethiopia: a cross sectional study.* BMC Health Serv Res, 2013. 13: p. 74.
23. Yilkal Tafere, M.W., Henok Assefa, Amanu Aragaw, *Utilization of Environmental Health Services of Urban Health Extension Program and Associated Factors in Debretabor Town, North West Ethiopia: Cross Sectional Study.* Science Journal of Public Health, 2014. 2(5): p. 8.
24. Abebaw, D., A. Woldemichael, and A. Admassie, *Impact evaluation of the Ethiopian Health Services Extension Programme*. Vol. 1. 2009. 430-449.
25. Marston, C., *et al., Effects of community participation on improving uptake of skilled care for maternal and newborn health: a systematic review.* PLoS One, 2013. 8(2): p. e55012.
26. Zulu, J.M., *et al., Integrating national community-based health worker programs into health systems: a systematic review identifying lessons learned from low-and middle-income countries.* BMC Public Health, 2014. 14(1): p. 987.
27. The project, T.L.T.K., *Baseline Household Health Survey: Amhara, Oromiya, SNNP, and Tigray*. 2009, JSI Research & Training: Addis Ababa, Ethiopia. p. 82.

How to cite this article:

Mesafint Wana, Atinafu Nega and Kassahun Tafesse Hidoto. 2020. Households Level of Participation towards Health Extension Program (HEP) and Factors Affecting at Nefas Silk Lafto Sub-city, Addis Ababa, Ethiopia. *Int.J.Curr.Res.Aca.Rev.* 8(4), 71-85. doi: https://doi.org/10.20546/ijcrar.2020.804.009