

Job Satisfaction and Associated Factors among Rural Health Extension Workers in East Shoa Zone, Oromia Regional State, Ethiopia

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Abstract

Background: Health Extension program (HEP) in Ethiopia is a core component of the broader health system that is adopted with a view to achieving universal coverage of primary health care to the rural population. However there is a concern that low motivation and job dissatisfaction of Health extension workers (HEWs) may decrease the benefit of investment in the implementation HEP.

Methods: a cross-sectional facility based study was conducted from January 15 to 24, 2018 in East Shoa zone of Oromia regional state, Ethiopia. 132 randomly selected Health Posts (HPs) from 8 districts and health extension workers (HEWs) workings in them were included in the study. Self-administered questionnaire was used to assess the job satisfaction and related factors. Single population formula was used to determine the sample size and simple random sampling method was used to select HPs and HEWs. Trained data collectors and supervisors collected the data. Data was entered into epidata & analyzed by SPSS 20 software. Multivariable logistic regression with 95%CI at $P \leq 0.05$ was used to determine the predictors of satisfaction.

Result: A total of 260 HEWs participated with the respond rate of 100%. The finding showed that 217(83.5%) of HEWs dissatisfied with their job. The major reasons reported for the dissatisfaction were lack of training opportunity, poor management and supportive supervision in problem solving, work load and lack of time for their family. Age of respondents, marital status and year of service were found to be significantly associated with job satisfaction.

Conclusion: Majority of the study participants were dissatisfied with their current job. The job dissatisfaction was attributed to poor problem solving capacity, recognition and rewarding system, inadequate in-service training and upgrading. Thus, it was recommended that health managers at all levels should give due consideration to mitigate the stated conditions.

Key words:

Job satisfaction . Health extension workers . Shoa . Ethiopia

Introduction

Community health workers (CHWs) are increasingly recognized as an integral component of the health workforce needed to achieve public health goals in low and middle-income countries (LMICs) [1]. The umbrella term "community health worker" embraces a variety of community health aides selected, trained and working in the communities from which they come. The use of community health workers has been identified as one strategy

to address the growing shortage of health workers, particularly in low-income countries [2].

Equivalent to Community health workers (CHWs) in Ethiopia is called Health Extension workers (HEWs). HEWs are the backbone for the health extension program (HEP) made it possible to target those who mostly need improvement in their access to services [3-5].

Ethiopia launched Health Extension Program (HEP) in 2004 GC to expand the national health program by expanding community based health interventions as a primary component of the Health Sector development program (HSDP). Rapid expansion of HEP services, which is a core component of the broader health system, became one of the strategies adopted with a view to achieving universal coverage of primary health care to the rural population, in a context of limited resources. The HEP has shown substantial outcome in areas related to disease prevention, family health, hygiene and environmental health. The program has improved the skewed distribution of health facilities and human resources. As a result of deployment of health extension workers, the human resources for health doubled within few years [3-8,13,14].

The implementation design of HEP involves deployment of two trained and salaried female HEWs at each kebele/village. These health extension workers are posted to rural communities across Ethiopia, where they provide a better and more equitable access to health services for the poor, women, and children in a sustainable manner [6,7]. HEWs were meant to spend 75% of their time by visiting families in their homes and performing outreach activities in the community and the remaining 25% time spent by providing essential family health services including immunizations and contraceptives at the health posts. To address strong community demands for basic curative care, HEWs are trained to provide first aid and to treat malaria, dysentery, intestinal parasites and other ailments and refer complicated and other cases to the nearest health center as needed [3-9]. Each kebele has a health post that serves 5,000 people and functions as an operational center for a health extension worker [6,7].

HEP has made important contributions to Ethiopia's achievements in the area of health. For example, reducing wasting, increase in improved sanitation facilities, access to modern family planning, maternal and newborn health care practices; expanded vaccination services; malaria control and prevention and reduction of new HIV infection [4-9].

However the country recognized Human Resource for Health (HRH) had been facing challenges including urban/rural and regional disparities, poor motivation, retention and performance [8,12]. In HEP implementation, irregular/no supply of drugs and lack of adequate skill, poor infrastructure, lack of carrier development and low remuneration were among the contributing factors for the poor motivation and low performance of HEP [13-16].

Anecdotal evidences show that high attrition, low motivation and job satisfaction of health extension workers has been recognized as a challenge for the region. Thus, this study tried to explore level of job satisfaction and factors affecting it among the HEWs in the study area.

Methods

The study was conducted among rural HEWs in east shoa zone, central Ethiopia from January 15 to 24, 2018 . The zone was divided into 10 rural and one urban districts. It was meant to serve for a total population of 1,440,144 (705,671 males and 734,473 females) nearly in a 1:1 female ratio. There were 2 hospitals, 59 health centers and 292 health posts in the zone. The health workforce of the zone was 2360 of which 559 (26.2%) were health extension workers.

A facility based Cross-sectional study design was employed.

Eighty percent of the district (8 out of 10 districts) and 50% (N=132) of the available health posts were included in the study to get a good deal of sample size acceptable for operational recommendation. As 2 health extension workers were assigned to each health post as a standard that makes a total of 264 HEWs. Thus, we included all the HEWs in the selected health posts as it is nearer to the calculated sample

The dependent variable was job satisfaction while the independent variables of measurement were: *Socio demographic characteristic* (Age, Marital status, education, Service year, Living house, Monthly income, Residence), *infrastructures* (water supply, electricity, telephone service, transport service), *Job and individual related factors* (Job content, service provided, ability/ skill, prospect for future career), *Work Load related factors* (Time for family, work interference, routine Vs additional work, expected work), *benefit related factor* (salary), *Management & leadership related factor* s(supervision, fairness/transparency, feedback, recognition), Promotion and training subscale (in-service training, upgrading, opportunity to improve skills, promotion), *Environment & community related factors* (relations with health center staff, support from kebele, availability of equipment and materials, community trust).

Data was collected using a pretested self-administered structured questionnaire. The questionnaire was prepared in English and translated to local language "Afan Oromo" for easy understanding by the respondents. Eight trained data collectors and 2 supervisors collected the data. The questionnaire was pre-tested on 5% of the study population in district out of the study area before the actual data collection began and adjusted.

The mean score for job satisfaction was computed using a five point Likert scale with a value ranging from 1 (very dissatisfied) to 5 (very satisfied) was used. Descriptive statistics was used to summarize the data and the results were represented using frequency tables, mean, standard deviation and percentages.

Bivariate analyses between dependent and independent variables were performed using chi-square (χ^2). The correlations between the variables was measured on an interval scale analyzed computing the product-moment correlation coefficients (i.e., Pearson's r) which showed the intensity and direction of the relationships between the variables. A multivariate logistic regression analysis was employed to identify the sociodemographic predictor variables of job satisfaction. Odds ratio with 95% CI was used to determine presence of association between explanatory variables and level of job satisfaction. To determine the overall job satisfaction level, respondents with average score of less than mean value were classified as dissatisfied and those with average score of mean value and above were considered as satisfied.

Ethical clearance was secured from ethical review board of Health Institute, official letter written from the university to the regional health bureau and the zonal health office was wrote a cooperation letter to woreda health offices. Verbal consent at spot of data collection was obtained from the study participants.

Result

Socio-demographic characteristics of the respondents

The study covered 132 HPs and 260 HEWs filled the assessment questionnaires. The age of the study participants ranged from 19 to 38 year with mean of 25.94 years and SD \pm 3.071 years. The service year ranged from 1 to 13 years with mean of 7.61 and SD \pm 3.345 years.

Regarding education among the respondents 155 (59.6%) were level III and 105 (40.4%) were level IV. One hundred and twenty three (47.3%) HEWs were within the range of 26-30 years of age and 122 (46.9%) them were serving for 6-10 years. About 172 (66.5%) of the study participants were married. Six hundred and sixty five (63.5%) of the respondents were living out of their catchment population. The study reveals 165 (63.5%) of the respondents were recruited from another kebele/Village. Regarding

infrastructure 143(55.5%) and 128 (49.2%) of HEWs are working where there is no water supply and transport service respectively (Table1).

Table 1: Socio-demographic characteristics of health extension workers at Health posts of East Shoa Zone, Oromia regional state, April 2018.

Variables	Frequency N (%)
Age in year	
18 -25	105 (40.4)
26 – 30	123 (47.3)
>30	32 (12.3)
Service in years	
1 – 5 years	78 (30)
6-10 years	122 (46.9)
>10	60 (23.1)
Marital status	
Single	88 (33.5)
Married	172 (66.5)
Educational status	
Level III	155 (59.6)
Level IV	105 (40.4)
Recruited address	
from this kebele	95 (36.5)
Outside this kebele	165 (63.5)
Place of living /home/	
in the kebele	95 (36.5)
Outside this kebele	165 (63.5)
Living house ownership	
Rented	172 (66.2)
provided by kebele	30 (11.5)
Own	58 (22.3)
Monthly Salary in Birr	
1835-2547	67(25.8)
2548-3215	73 (28.1)
3216-4085	45 (17.3)
4086-4685	75 (28.8)
Water supply available	
Yes	117 (45.5)
No	143(55.5)

Electricity available		
Yes	109 (41.9)	
No	151(58.1)	
Telephone service		
yes	112(43.1)	
no	148(56.9)	
Transport service		
Yes	132(50.8)	
No	128(49.2)	

Out of 260 respondents, 119 (45.8%) were satisfied with the contents of their job description. One hundred and eighty eight (72.3%) of HEWs believe as they have significant contribution in improving the health of the community they serve. Similarly 148 (56.9%) and 170 (65.4%) believe that they are satisfied with their ability to meet the health needs of the community and their contribution to the organizational goal respectively. Regarding their future perception for their career development and other chances 217 (83.5%) was dissatisfied.

With regard to workload and benefit subscales, 85.8% of HEWs were not satisfied with the workload and time they have for their family, 92.3% of HEWs were not satisfied with the work load they are perform and the salary they were paid. Most of HEWs, 231(88.8%), were dissatisfied with the interference in their work schedule and assignment of additional works while only 29 (11.2%) were satisfied with it.

Regarding to support from management, supervisors and catchment Health centers they were poorly satisfied. Only 20.4%, 27.7% and 30.8% of them were satisfied with the support they were getting from their management, supervisors and health centers respectively. About 80.4% of the respondents were believed that their work was not appreciated and recognized by management. Regarding feedbacks from their supervisors they were poorly (36.9%) satisfied.

The study revealed that, 79.2% were dissatisfied by the level of support from kebele for their routine work while 156 (60%) of them satisfied by community trust for them and services they were providing. The study also identified that they were poorly satisfied (22.7%) with the availability of equipment's and materials for services they provide. One hundred and twenty six (48.5) HEWs were satisfied by relationship with health center staffs while only 102 (39.2%) were satisfied with their supervisors relationship

Out of the total respondents only about 20.8% and 14.2% of them were satisfied with the opportunity for in-service training and by chances they have to improve their skill respectively. They were highly dissatisfied (82.7%) with the opportunity for upgrading. Similarly 188(72.3) were dissatisfied with the chances for promotion (Table2).

Table 2: Frequency distribution of responses on job satisfaction of health extension workers at Health posts of East Shoa Zone, Oromia regional state, April 2018.

Variables of job satisfaction	Response ate	
	satisfied	dissatisfi ed
Job and individual related subscale		
Satisfaction by contents of your job description	119 (45.8)	141(54.2)
satisfaction by the service you provide to the community	188 (72.3)	72 (27.7)

Satisfaction by your job contribution to organizational goal	170 (65.4)	90 (34.6)
Satisfaction by proud in doing your work	177 (68.)	83 (31.9)
satisfaction by your ability to meet the health needs of the community	148 (56.9)	112 (43.1)
Satisfaction by your prospect for future career	43(16.5%)	217(83.5 %)
Workload subscale		
satisfaction by the time you have for your family	37 (14.2)	223(85.8)
Interference in your program out of your schedule/ Autonomy	29(11.2%)	231(88.8 %)
Additional work have no effect on my free time	17(6.5)	243(93.5)
my work schedule not compromised by additional work out of my routine work	53(20.4)	207(79.6)
salary and benefit subscale		
Satisfaction by salary you paid	20 (7.7)	240 (92.3)
Management related subscale		
level of support from your boss	53 (20.4)	207 (79.6)
supportive supervision by your supervisors	72 (27.7)	188 (72.3)
Technical support from the health center	80 (30.8)	180 (69.2)
fairness in chances of being promoted	72 (27.7)	188(72.3)
feedback from your supervisors	96 (36.9)	164 (63.1)
recognition and rewards	51(19.6)	209(80.4)
Promotion and training subscale		
opportunity you have for in-service training	54 (20.8)	206(79.2)
opportunities you have for upgrading	45 (17.3)	215 (82.7)
the opportunity to improve your skills	37 (14.2)	223 (85.8)
your chance for promotion	72 (27.7)	188(72.3)
Work environment		
your relations with health center staff	126 (48.5)	134 (51.5)
level of support from kebele for your work	54 (20.8)	206(79.2)
availability of equipment and materials	59 (22.7)	201 (77.3)
availability of essential drugs	69(26.5)	191(73.5)
relationship with your supervisor	102(39.2%)	158(60.8 %)

trust of the community for your service	156 (60)	104(40)
over all your satisfaction by your job	47 (18.1)	213(81.9)

Factors associated with level of job satisfaction

To assess bivariate associations among satisfaction determinants, Spearman's rank order correlation analysis was carried out. In addition, to assess the relationships between satisfaction determinants and general job satisfaction, after controlling for other factors, multivariate regression models were estimated. Overall job satisfaction was estimated with the dependent variable being a dichotomous indicator equal to 2 if the respondent reported being either satisfied or very satisfied with her job and 1 if the worker either has no opinion, dissatisfied, or strongly dissatisfied.

Before multivariate logistic regression binary logistic regression was computed to identify candidate predictors for Sociodemography as

predictors of factors associate with level of job satisfaction. The only candidate predictors of job satisfaction after others controlled at first step were marital status, education, from where (kebele/village) Recruited, transport service and availability of electric services were analyze by multiple logistic regression. As a result marital status and availability of electricity were the significant predictors for overall job satisfaction of HEWs (Table3). This model of parameter estimate scored the hosmer and lemsnow test of model with the prediction capacity of 74.8%. Accordingly those HEWs working in where there is no electricity service were 59.3% less likely to be satisfied with overall job satisfaction compared to those working where there was electricity service ((AOR: 0.407 [95% CI: (0.175, 0.947)], (P<0.05). Those married HEWs were two times more likely satisfied with aspects of their job satisfaction when compared to those who were single ((AOR: 2.533 [95% CI: (1.256, 5.107)], (P<0.01)(Table 3).

Table 3: Multiple logistic regression analysis of predictors of job satisfaction HEWs at HPs East Shoa Zone, Oromia regional state, April, 2018.

Variable	N(%)	Satisfied (%)	Dissatisfied (%)	Crude OR (95%C.I.for OR)	Adjusted OR (95%C.I.for OR)
Marital status					
Single	88 (33.5)	34 (38.6)	54(61.4)	1	
Married**	172 (66.5)	95(55.2)	77(44.8)	2.706(1.421,5.152)	2.533(1.256,5.107)
Recruited from					
from same kebele	95(36.5)	55(57.9)	40(42.1)	1	
from another kebele	165(63.5)	74(44.8)	91(55.2)	0.537(0.264,0.1.04)	0.697(0.325,0.149)
Educational status					
Level III	155 (59.6)	123(79.4)	32(20.6)	1	
Level IV	105 (40.4)	90(85.7)	15(14.3)	0.641(0.328,1.253)	0.826(0.401,1.700)
Living House					
Rent	172 (66.2)	136(79.1)	36(20.9)	1	
Private	30 (11.5)	27((90)	3(10)	2.382(0.684, 8.299)	0.910(0.371,2.235)
provided by kebele	58 (22.3)	50(86.2)	8(13.8)	1.440(0.353,5.881)	0.321(0.089,1.158)
Transport service					
Yes	132 (50.8)	63(47.7)	69(52.3)	1	
No	128 (49.2)	66(51.6)	62(48.4)	1.6550(0.877,3.164)	1.167(0.548, 2.483)
Electricity available*					
Yes	109 (41.9%)	60(55)	49(45)	1	
No	151(58.1%)	69(45.7)	82(54.3)	0.359 (0.173, 0.742)	0.407(0.175, 0.947)

Pearson's correlation was done to measure the correlations between overall job satisfaction and each dimensions of job satisfaction. The correlation between the different aspects was found to be significant.

These differences suggest that satisfaction was not independent of the individual job aspect. General satisfaction and all the individual dimensions of job satisfaction had a positive medium relationship with each other at a low to medium level.

The result indicated that the job satisfaction dimension shows significant correlation with each other (0.096–0.526) and was correlated with the total (overall) satisfaction score (0.07–0.471) (Table 4).

Table 4: Pearson correlation between overall job satisfaction and dimensions of job satisfaction

	Overall satisfaction	job	Love for job	Salary	Promotion	Work environment	Workload	Management
Overall satisfaction	1							
love for job	0.370		1					
salary	0.070		0.096	1				
promotion	0.370		0.329	0.238	1			
work environment	0.461		0.364	0.065	0.364	1		
workload	0.374		0.274	0.342	0.300	0.278	1	
Management	0.471		0.298	0.176	0.526	0.492	0.408	1

Discussion

Job satisfaction of health extension workers plays a great role in implementing health extension program. It contributes to achieve HSTP in the country. Overall, only 18.1% of the study participants reported they were satisfied with their job. While more than two third of the study participants were dissatisfied in their job. This result is worse than the study finding conducted by Mulugeta Mekuria Mengistu¹, Ayele Geleto Bali², (2015) in west shoa zone which showed 34.9% of the study participants satisfied by their job [18]. This difference might be due to additional work assignments and over burden of HEWs by different responsibilities.

The finding of this study indicated that 148 (56.9%) of the study participants were satisfied with their job content and believe that they were satisfied with their ability to meet the health needs of the community. This result was little high from a research report by the society for human resource management (SHRM) finding which was 51% [19]. Similarly, a time motion qualitative study of HEWs conducted in 2015 has identified a pride of serving the community and seeing positive change were among Motivating factors frequently mentioned among HEWs [16]. This implies that HEWs were encouraged and satisfied by the changes they see in their communities as a result of their work.

Management issues are one of the major sources for employee satisfaction/dissatisfaction. Good leadership and management system can create good attitude toward achieving common organizational goal. It is effective to give recognition to an employee for a well done job to make them satisfied with their job. This study reveals that level of satisfaction with management and supportive supervision in problem solving was 53 (20.4) and 72 (27.7) respectively. This result was higher than the study result conducted on "Job satisfaction and associated factors among health care providers at public health institutions in Harari region, eastern Ethiopia, 2015" which was 44.3% for management style and communication modality. By strengthening relationship and communication with HEWs and being supportive and problem solving type of management may makes HEWS be more likely satisfied.

Nearly two third of respondents (80.4%) reported that they were dissatisfied with the recognition and rewards for their outstanding work and contribution. This finding may implies that Management's recognition and acknowledging of employee based on their job performance is very important to their job satisfaction.

Out of the total respondents 92.3% and 85.8% were dissatisfied in workload and time for their family respectively. This finding is two times higher than the study result conducted on community health workers in Rwanda which shows 47% for workload and 33% time for their family [17].

This difference might be due to additional work assignments and over burden by different responsibilities of HEWs.

In this study, HEWs reported low level of satisfaction with professional development opportunities and in-service trainings. Only 20.8% and 17.3% of the respondents were satisfied with the opportunities for training and upgrading chances respectively. The finding supported by the finding of a qualitative study conducted in Ethiopia, where, slow professional career growth and inadequate in-service refresher training were among demotivating factors [16]. This finding also in line with the finding of Mulugeta Mekuria Mengistu¹, Ayele Geleto Bali², 2015, Where 76.6% of the respondents reported that they were dissatisfied to this aspect [20]. The implication of these findings is that even though, services are available at health posts the quality of health care provided at health posts might be highly compromised because it is not complemented with current evidence based practices. In-service training and upgrading opportunity may build up the confidence of HEWs and increases their skill and help them to gain necessary information to perform their job and as a result increase their satisfaction. It also motivates as it is related with benefit.

With regard to fairness in chances of being promoted the study result show that 188 (72.3%) of the respondents were dissatisfied. The possible explanation given why HEWs dissatisfied with this aspect may be bias by managers in recognition for performance and unfair screening of individuals.

Satisfaction with availability of equipment and materials in this study was relatively very low (22.7%). This study results was in consistent with the finding of Hotchkiss et al. Human Resources for Health, 2015 [17].

Regarding satisfaction in relationship with health center staff and supervisors the study shows only 126 (48.5%) and 102 (39.2%) were satisfied respectively. This result was a little lower than the study result conducted in at public health institutions in Harari region, eastern Ethiopia, 2015" which was 51.5% [21-26]. This difference might be complained about a fault-finding attitude of supervisors and health center staff and lack of supportive and problem solving approaches.

Out of the total respondents, 92.3% of HEWs were not satisfied with the work load they are perform and the salary they were paid. This result is high from the study finding of Health Extension program Evaluation [14,27-32] which was 79%. This difference might be because of time difference.

This study revealed that about 165 (63.5%) of HEWs were living out of their catchment area. This may be resulted in unavailability HEWs in the community [33-36] to provide services in the community and at the Health Posts which has negative implication on their performance.

Overall dissatisfaction among health extension workers at east Shoa zone of Orormia Regional State is a cause for concern, given that job

satisfaction has implications for the efficiency, effectiveness and sustainability of the program in the region.

Limitation

The study was not covering all districts. Two districts were excluded due to security problem at the study period.

Conclusion

In conclusion health extension workers working in East shoa zone have showed low level of job satisfaction. HEWs were less satisfied with management and supportive supervision in problem solving, in-service training and upgrading opportunities, recognition and rewards for their performance, workload and time for their family and technical support from the health centers.

Thus, it was recommended that the managers of health services at all level should take measures to establish continuous need based in-service trainings, planned capacity building trainings for health extension program supervisors and develop recognition and reward mechanisms for best performers in order to improve the job satisfaction of the HEWs.

Conflict of interest

We, all the authors declare that we have no conflict of interest of any sort.

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Authors' contributions

All authors contributed to conception and design of the study, acquisition of data, data analysis and interpretation, funding acquisition, drafting and revising the manuscript.

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References

1. Zulfiqar A. et al. Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems; 2010.
2. Rodney A.M, & Hill P.S., Achieving Equity within universal health coverage: a narrative review of progress and resources for measuring success.2014, 1-8
3. Wang H, et al. Ethiopia Health Extension Program An Institutionalized Community Approach for Universal Health Coverage.2016
4. Wang H, & Ramana G.N.V. Universal Health Coverage for inclusive and Sustainable Development Country Summary Report for Ethiopia,2014.
5. Ethiopian Federal Ministry of Health, Health Sector Transformation Plan(2015/16-2019/20).2015;
6. Zewudu K, et al. Level of health extension service utilization and associated factors among community in Abuna Gindeberet District, West Shoa Zone, Oromia Regional State, Ethiopia 2014
7. Nej mudin K. et al. Health Extension Workers in Ethiopia:Improved Access and Coverage for the Rural Poor; 2003.
8. Karim A.M. et al. Effect of Ethiopia's Health Extension Program on Maternal and Newborn Health Care Practices in 101 Rural Districts: A Dose-Response Study .2013;8(6)
9. Admasu K, et al. Model Villages: a platform for community-based primary health care. Lancet Glob Heal [Internet]. World Health Organization; 2015; (15):300-1. Available from [http://dx.doi.org/10.1016/S2214-109X\(15\)00301-0](http://dx.doi.org/10.1016/S2214-109X(15)00301-0)
10. Rowe A.K., et al. How can we achieve and maintain high-quality performance of health workers in low-resource settings? 2005;366
11. Hotchkiss D.R., et al. Job satisfaction and motivation among public sector health workers; evidence from Ethiopia. Hum Resour Health[Internet].Human Resource for Health;2015;1-12. Available from <http://dx.doi.org/10.1186/s12960-015-0083-6>
12. Kok M.C., et al. Which intervention design factors influence performance of community health workers in low-and middle-income countries ? A systematic review 2015;(December 2014)
13. FMOHE.HEP profile_2015.pdf. Addis Ababa:FMOH;2015
14. University C for NHD of EC. Health Extension program Evaluation: Rural Ethiopia Part -I Survey [Internet].2010;1:2005-10 Availablefrom<http://www.cnhde.org.et/wpcontent/uploads/2013/04/part-1.pdf>
15. Bilal N. Health Extension program: An Innovative Solution to public Health Challenges of Ethiopia A case Study. HealSyst2020USAID[Internet].2012; Available from <http://www.healthsystems2020org/content/resource/detail/85866/>
16. Ababa A Health Extension Workers Time Motion Study Complemented by In-depth Interviews within primary Health Care Units in Ethiopia. 2015;(June).
17. WHO. Assessment of human resources for health: general guidelines. Evidence and Information for Policy Department of Health Service Provision, Geneva 2002.
18. Health Extension Program Evaluation: Rural Ethiopia Part - IV Support and Management of HEP; 2003.
19. Mc Caffery JA. Health Worker Retention and Performance Initiatives: Making Better Strategic Choices, the Capacity project, 2009.
20. Ndima S.D., et al. "Supervision of community health workers in Mozambique: a qualitative study of factors influencing motivation and programme implementation". Hum Resour Health [Internet]. Human Resources for Health; 2015; 1 – 10. Available from: <http://dx.doi.org/10.1186/s12960-015-0063-x>
21. Ayele, G., et al. "Job satisfaction and associated factors among health care providers at public health institutions in Harari region, eastern Ethiopia": a cross-sectional study, 2015.
22. David R. et al. Job satisfaction and motivation among public sector health workers: evidence from Ethiopia; 2015
23. Aarushi B. Determinants of motivation and job satisfaction among primary health workers: case studies from Nigeria and India. July 2014
24. Employee Job Satisfaction and Engagemen, A Research Report by the Society for Human Resource e M management (SHRM); 1948.
25. Caroline, C.C. The relationship between rewards systems and job satisfaction a case study at teachers service commission-kenya. April, 2014
26. Agezegn A. Factors Influencing Job Satisfaction and Anticipated Turnover among Nurses in Sidama Zone Public Health Facilities, South Ethiopia 2014.
27. Feysia B, et al. The health workforce in Ethiopia: addressing the remaining challenges. Washington, D.C.: The WorldBank; 2010.
28. IMPROVING HEALTH EXTENSION PROGRAM IN ETHIOPIA, An Evidence-Based Policy Brief July 2014
29. Andreassi, J. et al. "Job Satisfaction Determinants: A Study Across 48 Nations." Proceedings of 2012 Annual Meeting of the Academy of International Business-US North East Chapter: Business Without Borders. Ed. Jing'an Tang. Fairfield CT: Sacred Heart University, 2012.
30. Teoh T.T., et al. Research study on the correlation between employee job satisfaction and employee motivation. March, 2013.
31. Kok M.C., et al. A qualitative assessment of health extension workers relationship with the community and health sector in Ethiopia; opportunities for enhancing maternal health performance. Hum Resour Health [Internet].Human Resource for Health; 2015; 1-12. Available from <http://dx.doi.org/10.1186/s12960-015-0077-4>
32. Greenspan J.A. Sources of community health worker motivation: a qualitative study in Morogoro Region, Tanzania; 2013.
33. Tripathy J.P., et al. Measuring and understanding motivation among community health workers in rural health facilities in india-a mixed method

- study. BMC Health Serv Res [Internet]. BMC Health Service research; 2016;1-10. Available from: <http://dx.doi.org/10.1186/s12913-01614-0>
34. Källander K. et al. Evaluating the effect of innovative motivation and supervision approaches on community health worker performance and retention in Uganda and Mozambique: study protocol for a randomised controlled trial and s. Trials [Internet].; 2015
35. Mulugeta M.M. & Ayele G. "Factors Associated to Job Satisfaction Among Healthcare Workers at Public Hospitals of West Shoa Zone, Oromia Regional State, Ethiopia: A Cross Sectional Study", 2015.
36. Adama, D., et I. "Developing a tool to measure satisfaction among health professionals in sub-Saharan", 2013.