



Assessing satisfaction and motivation of health extension workers (HEWs) and factors associated with it in gambella region, Gambella, southwest Ethiopia, 2019: A cross-sectional study

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Abstract

Background: Health extension workers (HEWs) are the frontline health workers for Ethiopia's primary health care system. The Health Extension Program (HEP) is one of the most innovative community-based health programs launched by the Ethiopian Federal Ministry of Health (FMOH) to make health services accessible to rural communities by setting out women health extension workers (HEWs) in rural health posts. Ethiopia has initiated a nationwide community health program (referred to as Health Extension Program) that is primarily staffed with health extension workers; however, data on their satisfaction and motivation and related factors were not studied and scanty in the country. Thus, this study was aimed to assess measure the satisfaction of health extension workers and to identify factors affecting their satisfaction in the study setting in particular and the country in general.

Materials and Methods: A cross-sectional descriptive study analysis was conducted to collect relevant data on satisfaction from health extension workers who had been from three districts in Southwest Ethiopia. Items included in the questionnaires include values, organizational cultures, work place conditions, personality, motivating and satisfaction. They also included reasons for satisfaction and dissatisfaction; motivating and de-motivating from future perspectives using Likert scale. Mean and standard deviation were used to describe satisfaction level. Multiple linear regression model was used for identifying associated factors.

Result: The overall mean satisfaction score was 43.0 out of the 60 total score. Organizational culture, personal recognition and appreciation, job descriptions and criteria career structure and for promotion salary have been identified by rural HEWs as major were mentioned as a reason for satisfaction and motivating; while low salaries, insufficient training and lack of capacity among others, absence of transportation, poor supervision, and absence of housing living conditions were mentioned as reasons for dissatisfaction and de-motivating.

Conclusion: HEWs play a pivotal role in Ethiopia's HEP. As such, their motivations require special consideration to support them to continue doing their health care activities in a productive way. The HEWs were least satisfied with Salary pay, education, and benefits which require high level decision for strategies to improve the pay and benefits, and opportunities for education. They were also least satisfied with management and working conditions that can be addressed at organization level by supportive supervision and management, participatory decision making, clear job descriptions, merit based recognition and appreciation and balanced workload.

Keywords: cross sectional study, satisfaction, health extension workers, and Gambella

Introduction

Background

Community health workers are widely used to provide care for a broad range of health issues. However, there is insufficient evidence about the effectiveness of their work in implementing comprehensive primary health care. Since 2003 the government of Ethiopia has been deploying specially trained new cadres of community based health workers named health extension workers (HEWs). The HEP is a community based health care delivery program with a defined package of basic and essential promotes, preventive and curative health services ^[1]. In 2004 the Ethiopian Federal Ministry of Health (FMOH) launched a Health Extension Program: The program has four health subprograms; Disease Prevention and control, Family Health services; Environmental Hygiene & Sanitation; and Health education and communication. It gives special attention to mothers and children and operates from a health post. At the heart of the program is a taskforce of young

women trained in HEP modules for one year, after which they return home as salaried frontline health care staff. Deployed as pairs, the HEWs provide basic, largely preventive, primary health services to rural villages and empower families to take charge of their own health ^[2, 3]. Expanding access to basic health services is one of the challenges in public health programs in the developing countries. Countries have adapted different strategies to address this issue. Health service extension program (HEP) is an innovative approach implemented by the Government of Ethiopia to ensure wider implementation of its Health Sector Development Program. HEP is mainly based at a primary health unit (Health Post) and is designed to serve about 5000 population in the catchment area. Every health post is staffed by two female health extension workers (HEWs) who had under gone one year training, and receive salary from the government ^[4-5]. In improving service quality, efficiency and equity, the worker satisfaction is a key factor ^[2, 6-7]. However, deployment alone is not enough

to achieve a desired health outcome in the community. Retention and ensuring performance of HEWs is important to provide quality health services. Motivation of healthcare workers is believed to be a major concern as it is a key determinant for improving health workers' performance [7-8]. Satisfaction is measured in terms of opportunity to use abilities, chances to learn new things, chances to accomplish and to do things; their satisfaction in pay, fringe benefits, educational/training opportunities, and working conditions; and their satisfaction in co-workers, supervisors and management [10]. Satisfaction and motivation are very complex concept and it is hard to get a single definition that satisfies all. Individuals frequently change their aspirations and their needs and consequently their satisfaction differs in each situation which leads to development of different theories to account for different aspects of the concept of satisfaction and motivation [8-10].

Although much emphasis has been given to the deployment of HEWs to ensure PHC in Ethiopia, an intensive study to explore the particular experiences of HEWs, both personal and professional, and how this affects their motivation has not been conducted. Only a few studies have been undertaken on motivation of HEWs which are limited in scope and focus mainly on the quality of training, access to information, working conditions and assess the implementation of the Health Extension Program (HEP) [11, 12]. The Health Extension Program in Ethiopia is one of the major public health interventions that are producing promising results in terms of increasing the coverage of primary health care services. The Health Extension Workers are deployed in every village to implement the program however the level of their job satisfaction and factors affecting satisfaction has not been assessed. Therefore, this study was conducted with the aim of assessing satisfaction of HEWs and factors associated with it in Ethiopia. The finding of this study will help policy makers to undertake the necessary actions to strengthen the program. Therefore, this study was aimed to assess measure the satisfaction of health extension workers and to identify factors affecting their satisfaction in the study setting in Gambella, Ethiopia.

Materials and Methods

Study area, period and study design

A cross-sectional study was conducted among HEWs working in 160 health posts at Gambella Region, Southwest Ethiopia from January to March, 2018. It is located at 768 km far southwest from the capital of Ethiopia, Addis Ababa. The city has an elevation ranging from 400 to 600 meters above sea level and largely hot climatic zone. According to the Gambella people national regional state villagelation program sites the region has a total population of 422,002 [13-14]. The health posts were randomly selected from 2 districts (Goder and Menegeshe) in Mejange Zone, 4 districts (Lare, Makuey, Jekow and Itang) in Nuer Zone, 4 districts (Abole, Abobo, Dimma and Gog) in Aguaic Zone, Gambella Region, Southwest Ethiopia.

Sampling size determination and Sampling technique

A multistage sampling procedure was used to select study subjects. At the first stage, 10 districts were randomly selected among the 14 rural districts. At the second stage, 90 kebeles were selected randomly from the randomly selected districts. All HEWs in the selected kebeles were included in the study. Out of the total 90 kebeles in these districts, 18

kebeles of them had three Rural HEWs; and 4 kebeles of them of them had four Rural HEWs. The rest 68 rural kebeles of them had two Rural HEWs. From each selected district, 9 rural kebeles were selected. Rural kebeles with no functional health posts were excluded from the selection. Rural kebeles who have health facilities other than health posts were not also included in the study. All the selected kebeles were with functional health posts and HEWs.

Data collection procedures and Variable measurements

Data were collected using pretested structured questionnaire that was adopted from different similar previous studies [15, 16]. It was prepared first in English then translated into Amharic, Nuer and Agnuac languages. Finally, the questionnaires were administered in both Amharic and Agnuac languages. A self-administered structured Likert scale questionnaire was used to collect information. The items in the questionnaire were rated on a 5-point Likert scale format ranging from strongly disagree (1) to strongly agree (5).

The questionnaire had several section: background information on health extension workers; values, organizational cultures, work place conditions, and personality, and satisfaction from present perspective; and reasons for satisfaction, Motivation and retention; and dissatisfaction and De-motivation from future perspective. Data were collected during HEWs regular monthly meeting. The questionnaire was introduced and the process was facilitated by a trained data collection facilitators.

We used 12 items for measuring satisfaction, and 15 items for values, 13 items for organizational cultures, 21 items for workplace conditions, and 13 items for personality for measuring satisfaction determinants. The number of items was multiplied by 5 to get maximum score of 60 for satisfaction, and 75 for values, 65 for organizational cultures, 105 for workplace conditions, 65 for personality. The overall mean scores for values, organizational cultures, workplace conditions, personality, and satisfaction were calculated as the sum of individuals total scores out of maximum scores divided by the number of individuals (observations). We also used 15 items for reasons of satisfaction and retention and 15 items for reasons of dissatisfaction and attrition of HEWs from future perspectives.

Data processing and statistical analysis

The collected data were coded and entered using EPI-Info version-7 software. The data were exported to SPSS version 20 statistical software for further cleaning and analysis. The descriptive statistics show the distribution of respondents by the key variables. Descriptive statistics such as frequencies with percentages and mean with standard deviation were used to present categorical and continuous variables, respectively. The data was analyzed by calculating summated scores for the overall satisfaction. The Likert responses were summed up, and treated as interval data. Hence parametric statistical tests such as mean, standard deviation, and linear regression were applied. Mean and standard deviation were used to describe the demographic and work-related characteristics, determinants, satisfaction, and reasons for dissatisfaction. Simple linear regression was used to see the association between explanatory variables and outcome variable (satisfaction). Variables which had significant association with satisfaction were entered into

multiple linear regression to identify predictors of satisfaction.

Ethics approval and consent to participate

Ethics approval was issued by Institutional Review Board (IRB) of Gambella health science college (Protocol Reference: ERC 06104/2017) and a written informed consent was obtained from the study subjects prior to data collection after explaining the purpose and procedures of the study, the procedure to be followed during interview, risk/discomfort, benefits, incentive, the right to refuse or withdraw, and the persons to be contacted. Confidentiality was reassured during the interview and later by not including any personal identifiers. The respondents were also assured of their freedom to withdraw at any time of

self-administration of the questionnaire. Moreover, the privacy, anonymity, voluntary participation and confidentiality were ensured.

Results

Background characteristics of the study participants

Of the total 202 HEWs (15-35 years of age) selected, 194 (96.03%) were interviewed with an acceptable non-response rate less 3.97%. Slightly more than fourth fifth (85.57%) of the study participants were youth (25 and above years old). Approximately, 69.07% of study subjects were Protestants. Almost all of the study participants (95.5%) had married marital status. 42.27% of the study participants had supervisory role (Table1).

Table 1: Demographic and Work-related characteristics of HEWs, Gambella Region, Ethiopia, 2018 [N=194]

Characteristics of respondents	Frequency	Frequency Number (no./%)
District 2		
District 2: Agnuaic		76 (39.18)
District 2: Nuer		78(40.02)
District 3: Mejange		40 (20.80)
Total		194
Marital status		
Married (living with a partner)		185 (95.5)
Others**		9 (4.5)
Total		194
Religion		
Orthodox		40 (20.62)
Protestant		134 (69.07)
Others		20 (10.31)
Total		194
Age of respondents		
24 and less		94 (36.86))
25 and above		166(85.57)
Total		194
Total years of experience		
1-2 years		14 (9.22)
3-4 years		116 (57.79)
5-8 years		64 (32.99)
Total		194
Years of experience in the Health Post		
1-2 years		14 (9.22)
3-4 years		116 (57.79)
5-8 years		64 (32.99)
Total		194
Supervisory role		
Yes		82(42.27)
No		112 (57.73)
Total		194
Staff under supervision		
1 staff		60 (81.96)
2 staff		22 (18.09)
Total		82

The overall mean scores out of total scores were 60.05 (71) for value, 45.32 (61) for organizational culture, 72.64 (101) for workplace

Conditions, and 35.26 (64) for personality. The overall mean scores out of total scores were 42.09 (60) for satisfaction (Table 2).

Table 2: Mean Scores by HEWs on Satisfaction Determinants, and Satisfaction, Gambella Region, Ethiopia, 2018 [N=194]

Variables (number of items)	Mean Score (total score)
Value (15)	60.05 (71)
Organizational Culture (13)	45.32 (61)
Work Place Conditions (21)	72.64 (101)
Personality (13)	35.26 (64)
Satisfaction (12)	42.09 (60)

HEWs rated highest in satisfaction measuring items such as job (3.55), opportunity to use their abilities in their job (3.01), chances they have to accomplish something worthwhile (3.10), and their co-workers (3.15). They rated

least on satisfaction measuring items such as pay, education, benefit, management, and working conditions with mean score of 1.60, 1.64, 2.7, 3.02, and 3.05 respectively (Table 3).

Table 3: Mean Scores by HEWs on Satisfaction Measuring Items, Gambella Region, Ethiopia, 2018 [N=194]

Variables	Mean	SD
Satisfied with your job	3.55	1.138
Satisfied with your opportunity to use your abilities in your job	3.01	1.115
Satisfied with the chances you have to accomplish something worthwhile	3.10	1.201
Satisfied with your co-workers	3.15	1.130
Satisfied with your supervisor	3.57	1.267
Satisfied with the chances you have to do something that makes you feel good	3.55	1.274
Satisfied with the chances you have to learn new things	3.42	1.460
Satisfied with the physical working conditions	3.05	1.574
Satisfied with the management	3.02	1.361
Satisfied with the fringe benefits you receive	2.7	1.107
Satisfied with the educational/training opportunities	1.64	0.516
Satisfied with pay	1.60	0.417
Overall satisfaction	420.9	8.120

Improved supervision and management (3.41), personal recognition (3.25), and having clear job description and career development indicators (3.14) were mentioned as three reasons with highest scores; and high salary (2.22),

donor assistance (2.11), and salary supplements (2.32) were mentioned as three reasons with lowest scores for satisfaction and intention for staying in the current health post from future perspectives (Table 4).

Table 4: Mean Scores on Reasons for Satisfaction and Retention from Future Perspective, Gambella Region, Ethiopia, 2018 [N=194].

Reasons for Satisfaction and Retention	Mean	SD
Improved supervision and management	3.41	1.334
Personal recognition and appreciation	3.25	1.315
Job descriptions, criteria for promotion and career progression	3.14	1.419
Resource availability	3.22	1.410
Rotation from rural and remote posts	3.11	1.553
Rural recruitment and placement	3.07	1.439
Career development	3.12	1.565
Gender considerations	3.01	1.425
Improved working and living conditions	2.99	1.443
Non-financial incentives	2.94	1.465
Continuing education and training	2.88	1.557
Potential for dual practice	2.71	1.379
Salary supplements, benefits and allowances	2.10	1.212
Donor assistance for salaries and innovative financial incentives	2.11	1.212
Higher salaries - improved salaries and benefits	2.23	1.374

Low salary (3.69), lack of promotion and career structure (3.63), and inadequate living conditions (3.62) were mentioned as three reasons with highest scores; and mismatch in skills and tasks (3.25), poor working conditions

(3.40), and limited opportunities for professional development (3.41) were mentioned as three reasons with lowest scores for dissatisfaction and intention to leave the health post from future perspectives (Table 5).

Table 5: Mean Scores on Reasons for Dissatisfaction and Attrition from Future Perspective, Gambella Region, Ethiopia, 2018 [N=194].

Reasons for Dissatisfaction and Attrition	Mean	SD
Low salaries	3.69	1.419
Lack of promotion prospects/career structure	3.63	1.334
Inadequate living conditions	3.62	1.317
Heavy workload	3.62	1.349
Lack of job prospects	3.60	1.426
Lack of adequate allowances	3.60	1.404
Limited scope to upgrade	3.56	1.369
Inadequate facilities and shortages of drugs/equipment	3.56	1.344
Difficult transportation	3.55	1.420
Weak support, supervision and management	3.48	1.394
Limited opportunities for professional development	3.41	1.480
Poor working conditions	3.40	1.449
Mismatch in skills and tasks	3.35	1.418

In simple linear regression analysis, satisfaction had significant association with total years of experience, years of experience in the health post, values, organizational culture, workplace conditions, and personality ($p < 0.001$). In multiple linear regression analysis, satisfaction had

significant association with organizational culture ($p < 0.05$), and workplace conditions ($p < 0.001$). Satisfaction had no significant association with total years of experience, and years of experience in the health post as described in (Table 6).

Table 6: Multiple Regression-Satisfaction Determinants and Satisfaction, Gambella Region, Ethiopia, 2018 [N=194].

Affective Consequences of Motivation (Satisfaction)	Coefficient	Standard Error	t	P> t	95% Conf. Interval
Years of Experience in the HP	-.511	.307	-1.66	0.073	-1.156. 0549
Value	.013	.079	0.22	0.834	-.137. 171
Organizational Culture	.123	.061	2.33	0.011	.0231. 274
Workplace conditions	.314	.013	7.13	0.000	.220. 412
Personality	.017	.083	0.24	0.811	-.143. 171
Constant	9.16	5.162	1.80	0.073	-.781 18. 912

Discussion

Despite the overall positive impact, differences in implementing the HEP packages emerged by setting. Most of the rural HEWs and some urban HEWs reported that they managed to decrease child mortality, which seems plausible. However, the situation in Afar was completely different. Some of the pastoralist HEWs could not even recall most of the contents of health extension packages; leave alone contribute to the reduction of child mortality in their areas. Furthermore, despite reductions in child mortality, HEWs uniformly reported that they continued to witness mothers dying in their vicinities, which they attributed to insufficient training on assisting clean and safe delivery. The study indicated that maternal mortality remains to be formidable challenge for the country’s health care system [3, 6-8].

In the current study showed that satisfaction had significant association with organizational culture, and workplace conditions, and HEWs were better satisfied with their job, opportunity to use their abilities in their job, chances they have to accomplish something worthwhile, and their co-workers which is consistent with the study in Islamic Republic of Iran that indicated that community health workers were satisfied with their work and co-workers [17]. HEWs rated least on satisfaction measuring items such as pay, education, benefit, management, and working conditions which could indicate the dissatisfaction of health extension workers [10, 12, 15].

The finding of the current study is in line with similar studies conducted management problems (lack of fairness, lack of incentives, poor inter-professional relations poor communication system), poor salaries, lack of promotions, and poor access to training opportunities, poor working conditions and inadequate facilities for performing expected duties, and lack of career development opportunities [18-21], are among the factors that demotivate workers.

There is a general truth that inherent characteristics of workers, and their work related characteristics such as years of experience, will affect how they are perceived by members and their ability to work effectively and hence their satisfaction [22]. This study revealed that total years of experience had no significant association with satisfaction of the HEWs which is inconsistent with the common belief that that experience increases the level of satisfaction and commitment of workers in an organization [23]. This was also inconsistent with the study on rural health workers and their work environment, the role of inter-personal factors on job satisfaction of nurses in rural Papua New Guinea which showed that years in the profession had significant association with job satisfaction [24]. This may be due to the

peculiar situation of the study area in which there was no job rotation and transfer for HEWs at the time of the study.

We also assessed the reasons for satisfaction and retention and dissatisfaction and attrition from future perspectives. HEWs mentioned improved supervision and management, personal recognition, and having clear job description and career development indicators as a reason for motivation and intention for stay in the current health post. This is consistent with studies that indicated health workers tended to remain in their government positions for prolonged periods of time because they experienced personal rewards [25]; and non-monetary incentives such as supportive supervision, appropriate training, appropriate job aides, peer support, and refresher training are critical to the motivation, retention and success of any health service providers [22].

In assessing the reasons for dissatisfaction and intention for leaving the health post, low salary, lack of promotion and career structure, and inadequate living conditions were mentioned as top three reasons. Studies on motivation and retention of health workers in Bangladesh, Malawi, Ghana and Kenya also showed that lack of proper assistance and poor human resource management practices, including lack of supervision and continuous education, lack of rewards or recognition, lack of mentoring, lack, heavy workload, inadequate supplies and supervision pay were factors mentioned as reasons for attrition [26-29].

The finding of this study indicated that high salary was rated least as a reason for satisfaction and retention, but low salary was rated highest as a reason for dissatisfaction and attrition which shows that salary is a maintenance factor that if someone gets good salary he will not be satisfied but if he gets less he will be dissatisfied. This finding was in agreement with Herzberg’s Two-factor theory which states that factors affecting people’s satisfaction can be classified in to two as satisfiers and dissatisfiers (maintenance factors). This study was designed to assess the satisfaction of HEWs using a cross-sectional study design as such it is a snapshot HEWs’ satisfaction at one point in time so that causal relationship between satisfaction determinants and satisfaction cannot be ascertained.

Conclusion

The study indicated that satisfaction had positive significant association with workplace conditions, and organizational culture. This indicates importance of having better workplace conditions for satisfying workers. HEWs were least satisfied with pay, education, and benefits which require high level decision for improving the pay and

benefits, and opportunities for education. They were also least satisfied with management and working conditions that can be addressed at organization level by supportive supervision and management, participatory decision making, clear job descriptions, merit based recognition and appreciation and balanced workload.

Abbreviations

CHW: Community health worker; FGD: Focus group discussion; HDA: Health development army; HEP: Health Extension Programme; HEW: Health extension worker; TBA: Traditional birth attendant.

Competing interests/ Disclosure

We authors declared that we have no competing interests

Authors' Contributions

AM conceived the study, participated in the design, collection, and analysis of the study, and drafted the manuscript. GT participated in the conceptualization and design of the study and helped to draft the manuscript. WT helped in the design of the study and analysis of the data, and contributed to the drafting of the manuscript. All authors read and approved the final manuscript.

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Availability of data and materials

The data that support our conclusion of the study are obtained from the corresponding author up on reasonable request. Because, the data set is not shared publicly.

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