

Job Satisfaction Level and Associated Factors Among Rural Health Extension Workers of Sidama Region, Southern Ethiopia

Health Services Research and Managerial Epidemiology
 Volume 8: 1-7
 © The Author(s) 2021
 Article reuse guidelines:
sagepub.com/journals-permissions
 DOI: 10.1177/23333928211051832
journals.sagepub.com/home/hme



Assefa Philipos Kare¹ , Amelo Bolka Gujo¹ , and Nigussie Yohanes Yote¹

Abstract

Background: Rural health extension workers (HEWs) are essential for the implementation of the promotion and prevention-based health care policy of Ethiopia. Job satisfaction is believed to be one of the key factors that influence their performance. Information regarding job satisfaction and associated factors are limited in the study area. Therefore, this study was aimed at assessing job satisfaction level and associated factors among rural Health Extension Workers of Sidama Region, Southern Ethiopia.

Method: A facility-based cross-sectional study was conducted among 341 rural HEWs from 1 March to 30 April 2021. Data was collected using trained data collectors using pre-tested and self-administered questionnaires. SPSS version-25 was used for data analysis. Bi-variable and multi-variable logistic regressions were used to observe the association between the outcome variable and associated factors. The outputs are presented using an adjusted odds ratio (AOR) with a 95% confidence interval (CI).

Result: This study revealed that 36.6% (95% CI: 31.6%-41.6%) of the rural HEWs were satisfied with their job. Increased odds of satisfaction were observed among rural HEWs who got training opportunities (AOR: 3.74, 95% CI: 2.01, 6.98), education opportunities (AOR: 3.06, 95% CI: 1.56, 7.46), management support (AOR: 4.59, 95% CI: 2.44, 8.67), supervisor support (AOR: 7.40, 95% CI: 3.84, 14.26), and a better salary/payment (AOR: 4.18, 95% CI: 2.19, 7.88) compared to their counterparts.

Conclusion and Recommendation: The job satisfaction level among rural HEWs in the study area was low. Strategies to stimulate and strengthen recognition of management, supportive supervision, performance-based regular salary increment, and career developments are recommended.

Keywords

Health extension worker, job satisfaction, association, Sidama region, Southern Ethiopia

Background

Low income countries, particularly Sub-Saharan Africa often suffer from weak infrastructure, shortage of trained human resources, and poor supply chain management systems which resulted in a huge burden of diseases and deaths.¹⁻⁵ Countries in this region designed health interventions with various modalities in order to serve the poor and the most vulnerable population.⁶⁻⁹ In such resource-limited settings, community health workers (CHWs) based interventions brought significant and locally acceptable improvements in health systems.¹⁰

Ethiopia is one of the Sub-Saharan African countries the most affected by high diseases burden reflected by high rates of maternal and child mortality.¹¹ Before the government came up with innovative ways of scaling up the delivery of

essential health interventions, in particular through its Health Extension Program (HEP), low access to essential health services contributed to the high prevalence of infectious diseases and mortality rates registered in the country.¹⁰

In response to these challenges, Ethiopia launched HEP in 2004 as a component of the second five years Health Sectors

¹ Yirgalem Hospital Medical College, Sidama Region, Ethiopia

Submitted September 14, 2021. Revised September 14, 2021. Accepted September 15, 2021.

Corresponding Author:

Amelo Bolka Gujo, Department of Social and Population Health, Yirgalem Hospital Medical College, Yirgalem town Administration, Sidama Region, P.O.Box 184, Ethiopia.

Email: amelobolka@gmail.com



Development Program. A health post is an operational center for health extension workers (HEW). Two trained HEWs are assigned to one health post to serve about 5000 population in a kebele.¹² They provide health services through fixed and outreach bases; spend half of their working time conducting home visits and outreach activities, and the remaining half at their health post providing basic curative, promotive, and preventive services.^{13–16}

Health extension workers satisfied by their job and work environment are believed to be one of the key factors that influence the health sector's performance.¹⁷ Job satisfaction can build up their motivation, performance, and improve the quality, efficiency, and equity of the health services given to the rural community.^{18–20} Poor HEWs practices contribute to the low use of health services by the rural communities.^{21–23}

Interrelated factors like heavy workloads, lack of professional autonomy, poor supervision, long working hours, unsafe workplaces, inadequate career structures, poor remuneration/unfair pay, poor access to needed supplies, and limited or no access to professional development opportunities, and internal and international migration of workers determines the motivation of the health workforce.^{21,22,24–29} Understanding the perceptions of the HEWs' working environment and their levels of satisfaction with their roles is crucial.²⁰

Despite the fact that rural health extension workers are the backbone for the implementation of promotion and prevention-based quality health care provision for rural communities, there is limited researches/literature in the areas related to factors affecting job satisfaction level of them at the health post level. Therefore, this study was aimed at assessing rural HEWs' job satisfaction level and associated factors in Sidama National Regional State.³⁰

Methods and Materials

Study Area

This study was conducted among rural HEWs found in Sidama National Regional State. Administratively, the region is divided into thirty rural districts, six town administrations, and one city administration. It's one of the ten regional states found in Ethiopia and located 273 kilometers south of Addis Ababa, the capital of the country. It is located in the southern part of the country. Hawassa City is the capital of the region. The region is bordered in the north and east by the Oromia region, and in the south and west by the Oromia & south region. Based on the 2007 Ethiopia central statistical agency report estimation, the total population of the region was projected to be 4,369,214. The region has a tertiary hospital, 4 general hospitals, 12 primary hospitals, 137 health centers, 553 health posts, and 173 private facilities. The region has 1703 employed rural HEW during the data collection period. The study populations were all rural HEWs who worked in health posts of rural districts of the region.

Study Design and Period

Facility-based cross-sectional study among rural HEWs was held from 1 March to 30 April 2021 in Sidama Region, Southern Ethiopia.

Inclusion and Exclusion Criteria

All rural HEWs in selected districts who worked at least for a year in the assigned health posts were included. Rural HEWs, who were too sick or mentally not stable to respond to questions, were excluded.

Sample Size and Sampling Procedures

The sample size was calculated by using the single population proportion formula. The computation was made at a 95% confidence level, 5% margin of error, 44.2% of the job satisfaction level taken from the previous study,²⁶ and 10% non-response rate. The final sample size calculated was 341. A simple random sampling method was applied to select eight rural districts. All rural health extension workers working in health posts found in the selected districts were included in the study.

Variables and Measurements

Independent variables were: socio-demographic/economic (age, ethnicity, religion, marital status, place of residence, education level, monthly income level, service year), job and individual related factors, work load related factors, management and leadership related factors, promotion and training scale and environment and community related factors.

Job satisfaction was a dependent variable which was measured using the mean score computed using a five-point Likert Scale with a value ranging from very dissatisfied¹ to very satisfied.⁵ Investigators measured satisfaction level using multi-dimensional job satisfaction scales. To measure the level of job satisfaction of each individual, the mean value of all domains was calculated. The mean value of domains was taken as a cut point value to determine whether a rural health extension worker was satisfied with her job or not. Investigators categorized HEWs who scored mean and above under "satisfied" and the remaining under "unsatisfied".²⁶

Operational Definitions

Health post: is the lowest public health services unit at the local level with the main purpose to provide basic health services people who live in rural areas with limited curative and preventive care resources normally assisted by rural health extension workers.

Health extension program: a program that encompasses packages of health promotion, family health, disease prevention & control, and essential curative health services that are provided at household, community or Health post level by trained health extension workers.³¹

Job satisfaction: for this research, health extension workers were considered as satisfied with their job if they answered and got the score greater than or equal to the mean value among 24 questions developed to assess the satisfaction level of the respondents.

Rural: a geographic area that is located outside towns and cities; or any population, housing or territory not in a urban area or cities.

Rural health extension workers: are females who completed 10th grade of formal education, recruited from the community they serve, are deployed to provide care and preventive services at the health post (community level) after a one-year formal pre-service training; also supervises the community health workers and hold meetings with the community members.³²

Data Collection and Quality Control

Data was collected by pre-tested and self-administered questionnaires. It was prepared in the English language and language experts translated it into the local language (Sidamu Afoo) for easy understanding by respondents. Six data collectors and two supervisors were recruited, and two days training was provided. Pretesting of the data collection tool was done on 17 rural HEWs in Dale District, who were not included in the study. In addition to supervisors, principal investigators checked the consistency and completeness of the questionnaire on a daily basis.

Data Management and Analysis

Data were cleaned and checked its completeness, coded and entered into Epi Info 7, and exported to Statistical software for social science (SPSS) version 25 for analysis. Descriptive analysis was used to summarize the data. Bivariable logistic regression analysis was done for each independent variable with the outcome variable, and variables with a p-value of less than 0.25 were considered as candidates for multivariable logistic regression analysis to control possible confounders. Adjusted odds ratio with 95% CI was calculated to determine the presence and strength of association among predictors and outcome variables. A P-value of less than 0.05 was used to consider statistically significant variables. Finally, the results were described by texts and tables.

Ethical Clearance

Ethical clearance was obtained from Institutional Review Board of Yirgalem Hospital Medical College (IRB). Formal letters were written from the Yirgalem Hospital Medical College to the selected districts health offices and concerned officials were informed about the purpose of the study. Written letter to health posts were obtained from the heads of the health offices. Data were collected after taking written consent from the respondents.

Results

Sociodemographic Characteristics of the Study Participants

A total of 339 HEWs were participated in this study making the response rate of the 99.4%. The mean age (\pm standard deviation) of the study participants was 28.35 (\pm 4) years. More than two-thirds, 234 (69%) were above the age of 25 years. Nine in ten respondents were Sidama in ethnicity. Almost all, 326 (96.2%) of the respondents were Protestant religion followers. Regarding marital status, the majority, 286 (84.4%) were married. About half of the respondents, 173 (51.3%) attended College Diploma level IV and above. The service year ranged from 1 to 15 years with a mean of 9.34 and SD \pm 4.4 years. About half of the respondents, 166 (49%) served more than ten years. The median monthly salary of the respondents in a typical month was 5550 Ethiopian Birr (135.8 United States Dollar) and ranged from 2768 (67.7 US\$) to 8017 Eth Birr (196.2 US\$). Nearly two-thirds of respondents, 216 (63.7%) lived out of their catchment area. Regarding infrastructure, the vast majority, 322 (95%) of the study participants reported that they were working in the health posts where there is no water and electricity supply (Table 1).

Table 1. Socio-Demographic Characteristics of the Rural Health Extension Workers in Sidama Regional State, Southern Ethiopia, 2021.

Variables (n = 339)	Category	Frequency	Percent (%)
Age of the respondent	\leq 25 years	105	31
	>25 years	234	69
Ethnicity	Sidama	291	85.8
	Oromo	27	8
Religion	Amhara	21	6.2
	Protestant	326	96.2
Marital status	Orthodox	13	3.8
	Married	286	84.4
Educational status	Single	53	15.6
	Certificate/level III	165	48.7
Monthly income	College Diploma and above	174	51.3
	\leq 5700 Eth Birr (\leq 139.5 US\$)	186	54.9
Work experience	>5700 Eth Birr ($>$ 139.5 US\$)	153	44.1
	\leq 10 years	173	51
Position in health post	>10 years	166	49
	Head/focal person	111	32.7
Health post located at hometown	Technical staff	228	67.3
	Yes	123	36.3
Have water and electricity supply in the health post	No	216	63.7
	Yes	17	5%
	No	322	95%

Job Satisfaction of the Health Extension Workers

In this study, slightly more than one-third, 36.6% (95% CI: 31.6%-41.6%) of the rural health extension workers of the study area were satisfied with their job. Among the study participants 63 (18.6%), 135 (39.8%), and 160 (47.2%) were satisfied by their involvement in decisions making, contribution to institution's/organization's goal, and services provided to meet the health need of the community respectively. In terms of support, the factors that satisfied respondents were: supports and guidance received from supervisors 84 (24.8%), supervisors' commitment to maintaining high quality standards 120 (35.4%), an atmosphere of teamwork supervisor's created 139 (41%), management support 154 (45.4%), easy communication with members from all levels of the organization 184 (53.4%), and technical supports from the health center 231 (68.1%) (Table 2).

Similarly, the most frequently reported organizations related factors motivated respondents less likely were: the amount of workload 40 (11.8%), recognition and rewards given for performance 99 (29.2%), performance evaluation standards 105 (31%), organization's transparency of its rules 156 (46%), and contents of the job description 168 (49.6%). Two-hundred fifty (73.7%) respondents reported that they were dissatisfied with workplace buildings standard. Only eighty-five (25.1%) study participants were satisfied by the availability of types equipments and supplies necessary to their jobs (Table 2).

Two hundred sixty-six (78.5%) of the respondents reported they learned new job skills at current position. Concerning promotion and incentives, 170 (50.1%), 172 (50.7%), and 203 (59.9%) of respondents were satisfied by opportunities given to develop professional skills, training provided necessary to perform job, and chances for promotion/further education respectively. Only ninety-eight (28%) respondents satisfied by the salary paid to their current position whereas 139 (41%) reported they were satisfied by leave received according to institution's/government's rules (Table 2).

Factors Associated With Job Satisfaction

In the present study, both bivariate and multivariable logistic regression analyses were done to identify the predictors of job satisfaction level among HEWs. Eleven independent variables were associated with job satisfaction in bivariable analyses at $P \leq 0.25$ were entered into multiple logistic regression models. In multivariable logistic regression analysis, availability of training opportunity ($P < 0.0001$), further education opportunity ($P = 0.001$), amount of current salary/payment ($P < 0.0001$), management support ($P < 0.0001$), and supervisor support ($p < 0.0001$) showed a significant association with job satisfaction level (Table 3).

Accordingly, increased odds of satisfaction were observed in HEWs who got training opportunities (AOR: 3.74, 95% CI: 2.01, 6.98), further education opportunities (AOR: 3.06, 95% CI: 1.56, 7.46), management support (AOR: 4.59, 95% CI:

Table 2. Job Satisfaction Level of the Rural Health Extension Workers at Health Posts of Sidama Region, Southern Ethiopia, 2021.

Variable of job satisfaction (n = 339)	Response of HEWs	
	Satisfied (%)	Dissatisfied (%)
Contribution to Institution's/ organization's goal	135 (39.8)	204 (60.2)
Services provided to meet the health need of the community	160 (47.2)	179 (52.8)
Management support	154 (45.4)	185 (54.6)
Involvement in decisions making	63 (18.6)	276 (81.4)
Managers' and supervisors' commitment to maintain high quality standards	120 (35.4)	219 (64.6)
Organization's transparency of its rules	156 (46)	183 (54)
Contents of the job description	168 (49.6)	171 (50.4)
Amount of work load	40 (11.8)	299 (88.2)
Recognition and rewards given for performance	99 (29.2)	240 (70.8)
Performance evaluation standards	105 (31)	234 (69)
Easily communication with members from all levels of the organization	184 (53.4)	155 (45.7)
Work place buildings standard	89 (26.3)	250 (73.7)
Availability all necessary equipments and supplies	85 (25.1)	254 (74.9)
Task sharing with coworkers	239 (70.5)	100 (29.5)
Opportunities to develop professional skills	170 (50.1)	169 (49.9)
Trainings provided necessary to perform job	172 (50.7)	167 (49.3)
New job skills learned in this position	266 (78.5)	73 (21.5)
Chances for promotion/further education	203 (59.9)	136 (40.1)
Supports and guidance received from supervisors	84 (24.8)	255 (75.2)
Technical supports from the health center	231 (68.1)	108 (31.9)
Atmosphere of teamwork supervisor's created	139 (41)	200 (59)
Salary/payment	95 (28)	244 (72)
Leave(annual/sick/maternity) received according to institution's/government's rules	139 (41)	200 (59)
Over all job satisfaction	124 (36.6)	215 (63.4)

2.44, 8.67), supervisor support (AOR: 7.40, 95% CI: 3.84, 14.26), and a better salary/payment (AOR: 4.18, 95% CI: 2.19, 7.88) compared to their counterparts (Table 3).

Discussion

The result of this study presented that the overall level of job satisfaction of the rural health extension workers was 36.6%. This satisfaction level was higher than reports of previous studies conducted in the Shewa Zone of Oromia Regional State,³³ and, Nigeria.³⁴ This finding is comparable to studies done in West Ethiopia³⁵ and Pakistan.³⁶ It is lower than the

Table 3. A Multivariable Analysis Output of the Factors Associated with job Satisfaction among Rural Health Extension Workers, Sidama Region, Southern Ethiopia, 2021.

Variable (n = 339)	Category	Job satisfaction		COR (95% CI)	AOR (95% CI)	P-value
		Satisfied (%)	Dissatisfied (%)			
Age of respondents	≤25 years	27 (21.8)	78 (36.3)	0.49 (0.29, 0.81)	0.92 (0.39, 2.17)	0.856
	>25 years	97 (78.2)	137 (63.7)	1	1	
Education level	Certificate/Level III	57 (46)	108 (50.2)	0.84 (0.54, 1.31)	1.90 (0.93, 3.87)	0.076
	≥Diploma	67 (54)	107 (49.8)	1	1	
Work experience	≤10 years	57 (46)	116 (54)	0.72 (0.46, 1.13)	1.08 (0.49, 2.35)	0.845
	>10 years	67 (54)	99 (46)	1	1	
Monthly salary	≤5700 ETB (139.5 \$US)	74 (59.7)	112 (52)	1.36 (0.87, 2.13)	0.76 (0.39, 1.46)	0.409
	>5700 ETB (139.5 \$US)	50 (32.3)	103 (48)	1	1	
Position in health post	Head/Focal person	29 (23.4)	82 (38)	0.49 (0.30, 0.82)	1.53 (0.76, 3.06)	0.229
	Technical staff	95 (76.6)	133 (62)	1	1	
Health post location, hometown	Yes	45 (36.3)	78 (36.2)	1.01 (0.63, 1.58)	1.07 (0.56, 2.04)	0.829
	No	79 (63.7)	137 (63.7)	1	1	
Salary/payment	Yes	73 (58.9)	44 (20.5)	5.56 (3.42, 9.06)	4.18 (2.19, 7.99)	< 0.001
	No	51 (41.1)	171 (79.5)	1	1	
Trainings opportunity	Yes	95 (76.6)	77 (35.8)	5.87 (3.56, 9.68)	3.74 (2.01, 6.98)	< 0.001
	No	29 (23.4)	138 (64.2)	1	1	
Further education opportunity	Yes	95 (76.6)	108 (50.2)	3.25 (1.98, 5.32)	3.06 (1.56, 6.01)	0.001
	No	29 (23.4)	107 (49.8)	1	1	
Management support	Yes	84 (67.7)	70 (32.5)	4.35 (2.71, 6.98)	4.59 (2.44, 8.67)	< 0.001
	No	40 (32.3)	145 (67.5)	1	1	
Supervisor support	Yes	80 (64.5)	39 (18.1)	8.21 (4.95, 13.60)	7.40 (3.84, 14.26)	< 0.001
	No	44 (35.5)	176 (81.9)	1	1	

AOR = adjusted odds ratio; COR = crude odds ratio; ETB = Ethiopian Birr; \$US = United States Dollar.

satisfaction level reported from Gambella Region,¹⁸ Harar City,²⁶ Northwest Ethiopia,³⁷ Southwest Ethiopia,³⁸ South Ethiopia,³⁹ public health facilities of Ethiopia,²⁹ and China.⁴⁰ This difference could be due to the difference in the study population, setting, time of the survey, socio-economic status, organizational policies including health workers handling, and infrastructure between the study setups.

This study revealed that health extension workers who received stimulating recognition from management were more satisfied with their job compared to their counterparts. This finding was in line with studies carried out in East Shewa Zone of Oromia Region,³³ Harar City,²⁶ West Ethiopia,³⁵ and Northern Ethiopia,³⁷ public health facilities of Ethiopia,²⁹ Kenya,⁴¹ Eastern Cape,⁴² and Iran.⁴³ This could be explained as recognition has the potential to motivate the HEWs, enhance their skills, create a good attitude toward achieving the common organizational goal, and finally make HEWs more likely satisfied.

Similarly, rural health extension workers who got adequate supportive supervision in their work were more likely to be satisfied as compared to their counterparts. This finding is in line with studies done in the East Shewa Zone of Oromia Region,³³ Northeast Ethiopia,³⁷ Gambella Region,¹⁸ Kenya,⁴¹ and, Nigeria.³⁴ This could be explained by the fact that adequate and effective supportive supervision can motivate HEWs leading to satisfaction on their job.

Regarding career developmental opportunities like training and further education, and performance-based salary increment, our study presented they were the strongest determinants of job satisfaction level of the rural health extension workers of the study area. This finding was comparable with the previous studies done in Ethiopia,^{35,38,44} and Pakistan,³⁶ and Nigeria.³⁴ The possible reasons for this could be the fact that training increases the self-confidence and self-esteem of health extension workers, and improves the quality of care that would significantly elevate the morale of HEWs in the organization.

Limitations of the Study

This study was aimed at determining job satisfaction level and associated factors among rural HEWs in the region. However, the study was not free from some limitations. This study was conducted among rural HEWs only, and, therefore, it might not be possible to generalize the findings to all health workers of the region. This study also lacked qualitative aspects in assessing the job satisfaction level among rural HEWs.

Conclusion and Recommendation

The job satisfaction level among rural HEWs in the study area was low. Strategies to stimulate and strengthen recognition of

management, supportive supervision, performance-based regular salary increment, and career development were determinants of job satisfaction level. Thus, Ministry of Health of Ethiopia, and Sidama National Health Bureau coordinating with responsible bodies should develop strategies on the identified factors to enhance the job satisfaction level of rural health extension workers. Arranging opportunities for educational development is also one important strategy to enhance the workers' satisfaction level.

Acknowledgments

The researchers would like to acknowledge Yirgalem Hospital Medical College for funding the study. Last but not least, we also like to acknowledge in heart the staffs of Sidama National Regional Health Bureau, the selected districts health office staffs, the study participants, the data collectors, and supervisors.

Authors' Contributions

Study conceptualization: AB and AP; data curation: AB and AP; formal analysis: AB and AP; investigation: AB and AP; methodology: AB and AP; software: AB and AP; supervision: AB and AP; validation: AP and NY; writing the original draft: AB; review and editing: AB, AP, and NY.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The financial support for this study came from Yirgalem Hospital Medical College. The funding body was not involved in the collection, analysis, and interpretation of data and in the writing of the manuscript.

ORCID iDs

Assefa Philipos Kare  <https://orcid.org/0000-0002-6630-7465>
Amelo Bolka Gujo  <https://orcid.org/0000-0002-1233-8899>

References

- Rowe AK, de Savigny D, Lanata CF, Victora CG. How can we achieve and maintain high-quality performance of health workers in low-resource settings? *Lancet.* 2005; 366(9490):1026-1035.
- Jakovljevic M, Jakab M, Gerdtham U, et al. Comparative financing analysis and political economy of noncommunicable diseases. *J Med Econ.* 2019;22(8):722-727.
- Jakovljevic MB, Ekkert NV, Mikerova MS, Reshetnikov VA. BRICS nations growing impact on the global health sector. *MGIMO Rev Int Relations.* 2020;12(6):150-166.
- Jakovljevic MM. Comparison of historical medical spending patterns among the BRICS and G7. *J Med Econ.* 2016;19(1):70-76.
- Jakovljevic M, Fernandes PO, Teixeira JP, Rancic N, Timofeyev Y, Reshetnikov V. Underlying differences in health spending within the world health organisation Europe region comparing EU15, EU post-2004, CIS, EU candidate, and CARINFONET countries. *Int J Environ Res Public Health.* 2019;16(17):1-15.
- Bhutta ZA, Lassi ZS, Pariyo G, Huicho L. 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.
- Jakovljevic MM, Ogura S. Health economics at the crossroads of centuries - from the past to the future. *Front Public Health.* 2016;4:115.
- Ranabhat CL, Jakovljevic M, Dhimal M, Kim CB. Structural factors responsible for universal health coverage in Low- and middle-income countries: results from 118 countries. *Front Public Health.* 2019;7:414.
- Jakovljevic M, Timofeyev Y, Ranabhat CL, et al. Real GDP growth rates and healthcare spending - comparison between the G7 and the EM7 countries. *Global Health.* 2020;16(1):64.
- Bilal NK, Herbst CH, Zhao F, Soucat A, Lemiere C. Health extension workers in Ethiopia: improved access and coverage for the rural poor. 2010;433-443.
- Dolea C, Gardiner A, Gedik G, Kebede Y. Ethiopia's Human Resource for Health Program: Global Health Workforce Alliance Task Force on Scaling Up Education and Training for Health Workers. World Health Organization. 2010.
- Wang H, Tesfaye R, Ramana GNV, Chekagn CT. *Ethiopia Health Extension Program: an Institutionalized Community Approach for Universal Health Coverage.* World Bank Studies. World Bank; 2016. doi: 10.1596/978-1-4648-0815-9. License: Creative Commons Attribution CC BY3.0 IGO.
- Wang H, Tesfaye R, Ramana GNV, Chekagn CT. *Ethiopia Health Extension Program. An Institutionalized Community Approach for Universal Health Coverage.* World Bank/International Bank for Reconstruction and Development; 2016.
- WHO. *Ethiopian's Human Resources for Health Program. Global Health Workforce Alliance. Task Force on Scaling Up Education and Training for Health Workers.* World Health Organization. 2010.
- Workie NW, Ramana GN. *The Health Extension Program in Ethiopia.* UNICO Studies Series 10. World Bank; 2013.
- Medhanyie A, Spigt M, Kifle Y, 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 Serv Res.* 2012;12(352):1-9.
- Aziri B. Job satisfaction: a literature review. *Manage Res Pract.* 2011;3(4):77-86.
- Demmem AM, Terefe W, Tewabe G. Assessing satisfaction and motivation of health extension workers (Hews) and factors associated with it in Gambella region, Gambella, southwest Ethiopia, 2018: a cross-sectional study. *J Nutr Health Sci.* 2019;6(3):1-8.
- Salgado WB, Ayele M, Abriham G. Job satisfaction and associated factors among rural health extension workers in east shoa zone, oromia regional state, Ethiopia. *Primary Health Care: Open Access.* 2020;10(2):1-7.
- Abate HK, Mekonnen CK. Job satisfaction and associated factors among health care professionals working in public health facilities

- in Ethiopia: a systematic review. *J Multidiscip Healthc*. 2021;14:821-830.
21. Geleto A, Baraki N, Atomsa GE, Dessie Y. Job satisfaction and associated factors among health care providers at public health institutions in Harari region, eastern Ethiopia: a cross-sectional study. *BMC Res Notes*. 2015;8(394):1-7.
 22. Schwendimann R, Dhaini S, Ausserhofer D, Engberg S, Zúñiga F. Factors associated with high job satisfaction among care workers in Swiss nursing homes – a cross sectional survey study. *BMC Nurs*. 2016;15(37):1-10.
 23. Gedef G, Sisay Y, Alebel A, Bela YA. Level of job satisfaction and associated factors among health care professionals working at University of Gondar Referral Hospital, northwest Ethiopia: a cross-sectional study. *BMC Res Notes*. 2018;11(824):1-7.
 24. Fetene N, Linnander E, Fekadu B, et al. The Ethiopian health extension program and variation in health systems performance: what matters? *PLoS One*. 2015;11(5):1-19.
 25. Temesgen K, Aycheh MW, Leshargie CT. Job satisfaction and associated factors among health professionals working at western Amhara region, Ethiopia. *Health Qual Life Outcomes*. 2018;16(65):1-7.
 26. Geleto A, Baraki N, Atomsa GE, Dessie Y. Job satisfaction and associated factors among health care providers at public health institutions in Harari region, eastern Ethiopia: a cross-sectional study. *BMC Res Notes*. 2015;8(394):1-7.
 27. Hussen M, Yitayal M, Abaynew Y, Minyihun A. Rural health extension workers' intention to leave their jobs and associated factors, North Wollo Zone, northeast Ethiopia. *Ethiop J Health Dev*. 2020;34(2):106-113.
 28. Alwawi A, Koç A, Inkaya B. Factors affecting nurses' job satisfaction in medical surgical nursing care in Turkey: a systematic review. *Int J Health Serv Res Policy*. 2020;5(2):178-188.
 29. Ayalew F, Kibwana S, Shawula S, et al. Understanding job satisfaction and motivation among nurses in public health facilities of Ethiopia: a cross-sectional study. *BMC Nurs*. 2019;18(46):46.
 30. Birhanu Z, Godesso A, Kebede Y, Gerbaba M. Mothers' experiences and satisfaction with health extension program in Jimma Zone, Ethiopia: cross-sectional study. *BMC Health Serv Res*. 2013;13(74):1-10.
 31. Health FDRoEMo. Strategy for Revitalizing Health Extension Program in Pastoralist Areas. 2018.
 32. Assefa Y, Gelaw YA, Hill PS, Taye BW, Van Damme W. Community health extension program of Ethiopia, 2003-2018: successes and challenges toward universal coverage for primary healthcare services. *Global Health*. 2019;15(1):24.
 33. Salgado WB, Ayele M, Abriham G. Job satisfaction and associated factors among rural health extension workers in east Shewa Zone, Oromia regional state, Ethiopia. *Primary Health Care: Open Access*. 2020;10(2):1-7.
 34. Oluseyi OA. Intrinsic and extrinsic factors influencing job satisfaction among nurses working in two selected government owned hospital in Lagos, Nigeria. *J Med Sci Clin Res*. 2020;08(04):488-501.
 35. Deriba BK, Sinke SO, Ereso BM, Badachio AS. Health professionals' job satisfaction and associated factors at public health centers in west Ethiopia. *Hum Resour Health*. 2017;15(1):36.
 36. Kumar R, Shaikh BT, Ahmed J, Hafeez A. Job satisfaction among public health professionals working in public sector: a cross sectional study from Pakistan. *J Hum Resour Health*. 2013;11(2):1-5.
 37. Gedef G, Sisay Y, Alebel A, Belay YA. Level of job satisfaction and associated factors among health care professionals working at University of Gondar Referral Hospital, northwest Ethiopia: a cross-sectional study. *BMC Res Notes*. 2018;11(824):1-7.
 38. Yami A, Hamza L, Hassen A, Jira C, Sudhakar M. Job satisfaction and its determinants among health workers in Jimma university specialized hospital, southwest Ethiopia. *Ethiop J Health Sci*. 2011;21(special issue):19-27.
 39. Asegid A, Belachew T, Yimam E. Factors influencing job satisfaction and anticipated turnover among nurses in Sidama Zone public health facilities, south Ethiopia. *Hindawi Publ Corp Nurs Res Pract*. 2014;14:1-26.
 40. Ge C, Fu J, Chang Y, Wang L. Factors associated with job satisfaction among Chinese community health workers: a cross-sectional study. *BMC Public Health*. 2011;11(884):1-13.
 41. Nyambegera SM, Gicheru CN. Extrinsic and intrinsic factors influencing employee motivation: lessons from AMREF health Africa in Kenya. *Int J Bus Soc Res*. 2016;6(9):20-31.
 42. Morton D, Bowers C, Wessels L, Koen A, Tobias J. Job satisfaction of registered nurses in a private critical care unit in the eastern cape: a pilot study. *Health SA*. 2020;25(0):1345.
 43. Bagheri S, Kousha A, Janati A, Asghari-Jafarabadi M. Factors influencing the job satisfaction of health system employees in Tabriz, Iran. *Health Promot Perspect*. 2012;2(2):190-196.
 44. Girma B, Nigussie J, Molla A, Mareg M. Health professional's job satisfaction and its determinants in Ethiopia: a systematic review and meta-analysis. *Arch Public Health*. 2021;79(1):141.

Author biographies

Amelo Bolka Gujo has a Master Degree in General Public Health and Applied Human Nutrition from Hawassa University and is Lecturer of Public Health/Nutrition in Yirgalem Hospital Medical College.

Assefa Philipos Kare has a Master Degree in General Public Health from Hawassa University and is Lecturer of Public Health in Yirgalem Hospital Medical College.

Nigussie Yohanes Yote has a Master Degree in Epidemiology and Biostatistics from Arbaminch University and is Lecturer of Public Health in Yirgalem Hospital Medical College.