

Rural health extension workers' intention to leave their jobs and associated factors, North Wollo Zone, northeast Ethiopia

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Abstract

Background: The intention to leave primary jobs has risen in importance in the global dialogue on the health workforce. The related concept of staff turnover has also generated debate. This study was conducted to assess health extension workers' intention to leave their jobs in North Wollo Zone, northeast Ethiopia.

Methods: A cross-sectional study was conducted in North Wollo Zone from February to April 2016. Using a multi-stage stratified sampling technique, a total of 383 participants were selected. The data were entered into EpiData version 3.1 and exported to SPSS version 20 for analysis. Bivariable and multivariable logistic regression analyses were employed to identify significant factors. Odds ratios (ORs), 95% confidence intervals (CI), and p-values were used to measure the strength and presence of statistical associations.

Results: The study showed that 64.1% (95% CI: 59.2, 69) of health extension workers had an intention to leave their jobs. Statistically significant factors were: low salary (AOR = 2.23; 95% CI: 1.98, 4.25); high workload (AOR = 2.78; 95% CI: 1.46, 5.31); dissatisfaction with educational opportunities (AOR = 3.74; 95% CI: 1.56, 8.27); dissatisfaction with payments and benefits (AOR = 3.32; 95% CI: 1.87, 6.68); dissatisfaction with the lack of recognition (AOR = 2.15; 95% CI: 1.18, 3.63); and dissatisfaction with working environments (AOR = 1.96; 95% CI: 1.18, 3.52).

Conclusions: The proportion of participants who intended to leave their jobs was high. Hence, developing evidence-based retention strategies focusing on payments, educational opportunities, incentives, and work environment could help reduce the intention of health extension workers to leave their jobs. [*Ethiop. J. Health Dev.* 2020; 34(2):106-113]

Keywords: Intention to leave, health extension workers, North Wollo Zone, Ethiopia

Introduction

The term 'intention to leave' refers to a subjective individual prediction about shortly leaving a job in a workplace or organization, and is considered as a proxy of actually leaving an organization (1,2). There are significant methodological challenges when attempting to measure and compare intention to leave (3), which is the strongest antecedent of turnover. Some studies define turnover as any job move, while others consider turnover as leaving the organization or even leaving the profession (4).

Health systems in sub-Saharan African countries often suffer from weak infrastructure, lack of human resources, and poor supply chain management systems. Access to health services is particularly low in rural areas, where the majority of the population lives (5). In Ethiopia, the utilization of health services during illness shows rural-urban differences: 9.5% in rural settings and 14% in urban areas (6). Employees' intention to leave and instability at health facilities is particularly high in developing countries (7,8). In southern Ethiopia, 59.4% of health professionals intended to leave their workplaces (9). Similarly, in the Amhara Region of Ethiopia, 60.2% of nurses reported they wanted to leave their current places of work (10).

Ethiopians' access to services was particularly low before the government developed innovative ways of scaling-up the delivery of essential health interventions, in particular through its Health Extension Program (HEP). The HEP enabled Ethiopia to achieve

significant improvements in maternal and child health, communicable diseases, hygiene and sanitation, knowledge, and healthcare-seeking behavior (11). The HEP was designed and implemented in recognition of the fact that the major factor underlying poor health services in Ethiopia was the lack of empowerment of households and communities to promote health and prevent disease (12).

The success of the HEP might be affected by several factors. The first and foremost of these is the ability of the system to retain HEWs for a long period to ensure continuous improvement of the services delivered by these workers (13).

Even though the government has trained and assigned two HEWs per kebele (lowest administrative unit in the country), nowadays HEWs are leaving their jobs for various reasons, and many kebele/health posts tend to be closed or are forced to be served by one HEW, which makes it difficult to provide all the required services and address the community at large. Amhara Region, as in other parts of the country, is facing high attrition of HEWs, with the highest attrition reported in North Shewa and North Wollo zones. To make the HEP successful as intended, determining the magnitude of the intention to leave and recommending strategies for decision-makers are of paramount importance (14).

Intention to leave is the strongest antecedent of actual turnover and is also an intermediate variable between job satisfaction and turnover. High turnover among

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HEWs has the potential to affect health care provided to patients and communities, as well as the morale, performance, and productivity of the remaining HEWs. A previous study shows that factors that influence the turnover of HEWs include workload, work schedule, workplace stress, leadership and management styles, training and promotional opportunities, and a disjuncture between HEWs' expectations and the reality of the workplace (15). However, the main reasons why HEWs intend to leave their jobs have not been well identified in the study area. Therefore, this study aimed to assess the magnitude of HEWs' intention to leave their jobs and factors associated with their intention.

Methods

Study design and area: The cross-sectional study was conducted in North Wollo Zone from February to April 2016. North Wollo Zone is in the Amhara Region of Ethiopia, with a total population of 1,555,892. In the zone, there are 12 districts, three hospitals, 62 health centers, 273 health posts, and 981 health workers, of whom 589 are HEWs.

Population: The source population was all HEWs working in the North Wollo Zone, whereas all HEWs who were working in the zone were the study population.

Sampling technique and sample size: A multi-stage stratified sampling technique was used to select the study participants. The districts in the zone were stratified into two ('Kola' and 'Dega'), based on altitude, and the sample size was proportionally allocated to each stratum. The list of HEWs at the district level was used as a sampling frame. Four districts in Kola and four districts in Dega were selected from each stratum using the lottery method. Finally, all eligible HEWs at each selected district were included in the study.

All HEWs in North Wollo Zone who had worked for at least six months before the study were included in the study. The sample size was determined using a single population proportion formula and by assuming a 95% confidence interval (CI), 5% margin of error (d), and 52.5% proportion of professionals' intention to leave (16), 1.5 design effect, and 10% non-response rate. Accordingly, the final sample size was 383 HEWs.

Data collection procedures: A self-administered, structured, Likert scale questionnaire was used to collect information. The questionnaire was prepared in English and translated into Amharic (local language), and then back into English to check for consistency. The questionnaire was pre-tested on 15 (5%) HEWs who were not part of the study.

Study Variables

Dependent variable: The dependent variable, intention to leave, was defined as the totality of HEWs who had the notion of leaving the organization and was measured using three items, following Mobley *et al.*'s definition (17). Respondents were asked to indicate the

extent of their agreement using a 5-point Likert scale (ranging from 1: strongly disagree to 5: strongly agree). Respondents who scored more than 60% of the sum of all the 'intention to leave' scale items were considered as showing an intention to leave (18), whereas turnover was defined as the number of employees who have left an organization compared with the number who have stayed, over a fixed timeframe. Turnover can either be voluntary (when an employee chooses to leave) or involuntary (when the employer initiates the employee's departure).

Independent variables: The independent variables such as job satisfaction, organizational commitment, workload, educational opportunity, work environment, and pay and benefit were defined and measured as follows.

Job satisfaction was measured using a 5-point Likert scale of 70 items that included 12 subscales: five items for pay and benefit, 12 items for supervisor support, five items for policy and strategy, five items for coworker relationship, six items for a training opportunity, 10 items for the nature of work, three items for responsibility, three items for autonomy, seven items for workload, three items for performance appraisal, four items for recognition and reward, and seven items for the work environment. HEWs who scored >60% of the sum of the satisfaction scales were considered as satisfied (18). The reliability of the tool for each subscale was checked using Cronbach's alpha reliability test, with a score of greater than 0.82.

Organizational commitment (affective, normative, and continuance commitment) was assessed using the scales developed by Meyer & Allen (19). A 5-point Likert scale (ranging from 1: strongly disagree to 5: strongly agree) of three items for each component was used. A score with more than 60% of the sum of the commitment scales represented a high organizational commitment.

Workload described the participants' work requirements and the amount of time and resources for this requirement. It was measured using seven items, each scored on a 5-point Likert scale.

Educational opportunities described the availability of advancement opportunities for employees within the organization. It was measured using six items, each scored on a 5-point Likert scale.

Work environment described the quality of the working environment, both its physical attributes and the degree to which it provides meaningful work. It was measured using seven items, each scored on a 5-point Likert scale.

Pay and benefits described employees' expectations of fairness and adequate compensation in relation to payment, i.e. the extent to which they perceive they receive a fair day's pay for a fair day's work. It was measured by five items, each scored on a 5-point Likert scale.

Data analysis: The data were entered into EpiData version 3.1 and transferred to SPSS version 20 for analysis. Binary logistic regression was used to check the association of intention to leave with the explanatory factors. Explanatory variables that had a significant association with HEWs' intention to leave, at a p-value of less than 0.2 in the bivariable logistic regression, were entered into a multivariable logistic regression model to identify predictors of HEWs' intention to leave. Crude odds ratios (CORs), adjusted odds ratios (AORs) with 95% CI, and p-values <0.05 were used to determine statistical significance.

Results

Socio-demographic characteristics of study participants: A total of 367 HEWs participated in the study, with a response rate of 95.8%. The study showed that the mean age of respondents was 26.88±3.162 years; 64.3% of the respondents were married; 29.4% were Level 3 diploma graduates; 47.7% of the respondents had a monthly income of ETB 2,001 or above, and 68.9% had 7-11 years of service (see Table 1).

Table 1: Socio-demographic and economic characteristics of rural HEWs in North Wollo Zone, northeast Ethiopia, 2016 (n=367)

Variables	Number	%
Age		
18-25	181	49.3
26-35	152	41.4
≥36	34	9.3
Marital status		
Married	236	64.3
Single	85	23.2
Divorced	37	10.1
Widowed	9	2.4
Educational status		
Certificate	166	45.2
Level 3 Diploma	108	29.4
Level 4 Diploma and above	93	25.4
Service (years)		
0-6 years	114	31.1
7-11 years	253	68.9
Monthly salary in Ethiopian Birr		
1,158-1,500	85	23.2
1,501-2,000	107	29.1
2,001 and above	175	47.7

Respondents' responses about their intention to leave their primary jobs: The study revealed that the overall intention of HEWs to leave their jobs was 64.1% (95% CI: 59.2, 69); 27% of HEWs were satisfied with the policy and strategy of the organization, 16.9% were satisfied with educational opportunities, 14.2% were satisfied with the payments and benefits, 24.8% were satisfied with the nature of the work (work that the

HEWs are doing for and with the community at the grass-root level in their locality), 22.8% were satisfied with the recognition and rewards, and 10.4% were satisfied with working environments. On the other hand, 89.1% of HEWs had a high level of satisfaction with the relationship with their coworkers; and 52.3% had a high level of affective commitment (see Table 2).

Table 2: **Job satisfaction among rural HEWs in North Wollo Zone, northeast Ethiopia, 2016 (n=367)**

Variables	Number	%
Policy and strategy		
Satisfied	99	27.0
Dissatisfied	268	73.0
Coworker relationship		
Satisfied	327	89.1
Dissatisfied	40	10.9
Educational opportunities		
Satisfied	62	16.9
Dissatisfied	305	83.1
Pay and benefits		
Satisfied	32	14.2
Dissatisfied	315	85.8
Nature of the work		
Satisfied	91	24.8
Dissatisfied	276	75.2
Workload		
Low	140	38.1
High	227	61.9
Responsibility		
Satisfied	177	48.2
Dissatisfied	190	51.8
Supervisor support		
Satisfied	153	41.7
Dissatisfied	214	58.3
Autonomy		
Satisfied	162	44.2
Dissatisfied	205	55.8
Performance appraisal		
Satisfied	126	34.4
Dissatisfied	241	65.6
Recognition		
Satisfied	84	22.8
Dissatisfied	283	77.2
Working environment		
Satisfied	38	10.4
Dissatisfied	329	89.6
Continuance commitment		
High	131	35.7
Low	236	64.3
Normative commitment		
High	103	28.0
Low	264	72.0
Affective commitment		
High	192	52.3
Low	175	47.7

Factors associated with the intention of rural HEWs to leave their primary jobs: Variables such as monthly income, satisfaction with educational opportunities, satisfaction with payments and benefits, workload,

recognition, and working environment were found to be significantly associated with the intention of HEWs to leave their primary jobs.

The HEWs who had a monthly salary of less than ETB 2,000 were 2.23 (AOR = 2.23; 95% CI: 1.98, 4.25) times more likely to leave their primary jobs compared to those who had a monthly salary greater than ETB 2,000; HEWs who were dissatisfied with educational opportunities were 3.74 (AOR = 3.74; 95% CI: 1.56, 8.27) times more likely to leave their primary jobs compared to satisfied HEWs; HEWs who were dissatisfied with payments and benefits were 3.32 (AOR = 3.32; 95% CI: 1.87, 6.68) times more likely to leave their primary jobs compared to those who were satisfied. In addition, HEWs who had a high workload

were 2.78 (AOR = 2.78; 95% CI: 1.46, 5.31) times more likely to have an intention to leave their jobs compared with HEWs who had a low workload; HEWs who were dissatisfied with recognition were 2.15 (AOR = 2.15; 95% CI: 1.18, 3.63) times more likely to intend to leave their jobs than HEWs who were satisfied with recognition; and HEWs who were dissatisfied with their working environments were 1.96 (AOR = 1.96; 95% CI: 1.18, 3.52) times more likely to intend to leave compared to HEWs who were satisfied with their working environments (see Table 3).

Table 3: Factors associated with intention to leave among rural HEWs in North Wollo Zone, northeast Ethiopia, 2016 (n=367)

Variables	Intention to leave		COR (95% CI)	AOR (95% CI)
	Yes	No		
Marital status				
Currently married	156	82	1.00	1.00
Unmarried (sum of single, widowed and divorced)	79	50	0.83 (0.71, 1.29)	0.92 (0.87, 1.14)
Educational status				
Certificate	104	62	1.00	1.00
Level 3 Diploma	62	46	0.80 (0.56, 1.01)	0.96 (0.61, 1.12)
Level 4 Diploma and above	69	24	0.58 (0.35, 0.84)*	0.68 (0.42, 1.17)
Monthly income				
Less than ETB 2,000	144	48	2.77 (1.78, 4.31)**	2.23 (1.98, 5.25)*
ETB 2,000 and above	91	84	1.00	1.00
Educational opportunities				
Satisfied	10	52	1.00	1.00
Dissatisfied	225	80	14.62 (6.47, 25.15)**	3.74 (1.56, 8.27)*
Pay and benefits				
Satisfied	8	24	1.00	1.00
Dissatisfied	227	88	7.74 (3.02, 11.81)**	3.32 (1.87, 6.68)*
Nature of the work				
Satisfied	52	39	1.00	1.00
Dissatisfied	183	93	1.48 (1.11, 2.57)*	0.71 (0.28, 1.41)
Workload				
Low	50	90	1.00	1.00
High	185	42	7.93 (4.29, 11.51)**	2.78 (1.46, 4.31)**
Supervisor support				
Satisfied	87	66	1.00	1.00
Dissatisfied	148	66	1.70 (1.08, 2.85)*	0.79 (0.36, 1.73)
Performance appraisal				
Satisfied	75	51	1.00	1.00
Dissatisfied	160	81	1.34 (0.95, 2.38)	0.71 (0.33, 1.51)
Recognition				
Satisfied	34	50	1.00	1.00
Dissatisfied	201	82	3.60 (2.17, 5.24)**	2.15 (1.18, 3.63)*
Working environment				
Satisfied	18	20	1.00	1.00
Dissatisfied	217	112	2.15 (1.70, 3.94)**	1.96 (1.18, 3.52)*

AOR: adjusted odds ratio, CI: confidence interval, COR: crude odds ratio, ETB: Ethiopian Birr

* P<0.05, ** P<0.001, 1.00: reference category

Discussion

The findings of this study showed that 64.1% of the respondents had an intention to leave their primary jobs. This is higher than the findings of studies conducted among health professionals at the University of Gondar Referral Hospital, which showed a rate of 52.5% (20), and among nurses working at governmental healthcare institutions in East Gojjam Zone, at 59.4% (21); and is much higher than the findings of studies conducted among health workers in Tanzania (18.8%), Malawi (26.5%) and South Africa (41.4%) (22). These differences could be due to variations in health institution infrastructures, study settings, and the fact that in some of the studies participants were nurses. However, it is lower than the findings of studies conducted among health professionals in Sidama Zone public health facilities, which recorded a proportion of 84.3% (20), and Yirgalem and Hawassa referral hospitals in south Ethiopia, at 83.7% (22,23). This discrepancy could be due to the result of differences in the infrastructures of the health institutions, study areas. The difference could also be due to differences in study participants as these studies focused on specialists, general practitioners, health officers, nurses, and laboratory technologists.

The current study shows that HEWs who have a low salary are more likely to have the intention to leave their primary job, which is consistent with a study done among Malawian nurses. This could be because having a better salary is one of the incentives that encourage workers to remain in their current jobs (24,25).

Our findings also showed that HEWs who were dissatisfied with educational opportunities were more likely to have the intention to leave their organizations compared with HEWs who were satisfied. As reported by other studies, poor educational opportunities increase the intention to leave (18,21,26). This can be explained by the fact that fewer professional training opportunities may increase job dissatisfaction because of the absence of the potential to increase and develop one's skills and abilities for the HEP.

Our findings show that HEWs dissatisfied with payments and benefits were more likely to have the intention to leave their jobs compared to their satisfied counterparts. This finding is consistent with the results of other similar studies conducted in Ethiopia (18,21). This could be explained by the disproportionality of tasks assigned and benefits given, which could push workers to search for new jobs, whereas satisfied workers are likely to remain in their organizations because their needs are being met.

Our study identified that HEWs with a high workload were more likely to intend to leave their jobs, which is consistent with the findings of other studies (27,28). This could be because having an excessive workload might increase pressure and result in high fatigue, which may lead employees to seek jobs elsewhere.

Intention to leave was higher among respondents who were dissatisfied with the recognition and rewards

provided compared to their satisfied counterparts. This finding is supported by a study conducted among Jordanian nurses, which revealed the direct and buffering effects of recognition of the performance of nurses on the intention to stay in jobs (29). This might be because of the belief held by satisfied professionals that leaving organizations that reward them would be costly, in that the opportunities might be unlikely to be obtained elsewhere. This suggestion finds resonance in Herzberg's two-factor theory of motivation (30). Our findings also showed that HEWs who were dissatisfied with working environments were more likely to leave their jobs compared to their satisfied counterparts. This finding is in agreement with studies carried out at public health facilities in Sidama and Jimma zones, Ethiopia (28,31), as well as with Herzberg's two-factor theory of motivation, which identifies recognition, work conditions, the nature of work, and responsibility as factors that influence employee intention to stay or leave a job or organization (30). The other possible explanation could be that substandard working conditions or lack of important facilities in workplaces – such as a proper office, furniture, house, and health and safety provisions – reduces the convenience of employees and decreases their intention to stay in jobs.

In this study, there were other factors, such as marriage and years of experience, which were not statistically significant in multivariable analysis. In most cases, employees who are recently employed, or who have fewer years of experience may not get married or may not have partners or families which could lead them to intent to leave the organization compared to employees who have more years of experience, and who get married, or have partners or families. But, the finding of this study showed that almost two-thirds of participants who were married had seven or more years of service in the organization. This finding shows a similarity with other studies (32,33).

Conclusions

In this study, HEWS' intention to leave their jobs is considered high. Low salary, dissatisfaction with educational opportunities, dissatisfaction with payments and benefits, high workload, dissatisfaction with recognition and poor working environments, were factors associated with HEWs' intention to leave their primary jobs. Therefore, developing evidence-based retention strategies focusing on payments, education opportunities, incentives, and work environment, could help reduce the intention of HEWs to leave their jobs.

Limitations of the study

The study does not show the causal relationship between the HEWs' intention to leave their jobs and the explanatory variables, due to the nature of the study design used. Also, the study did not use qualitative methods, which could have helped to capture the experiences of HEWs in their current jobs.

Ethics approval and consent to participate

The Wollo University Ethics Review Committee approved the research proposal. Official permission was also obtained from the zonal health desk and

woreda health offices, including cluster health centers. Written informed consent was obtained from each study participant. Personal identifiers of respondents were not taken to ensure confidentiality. The respondents were informed of their freedom to withdraw at any time while they were being interviewed.

Authors' contributions

All authors contributed towards data analysis, drafting and critically revising the paper; gave approval of the final version to be published; and agreed to be accountable for all aspects of the work.

Availability of data and materials

Data is available upon request from the corresponding author.

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Competing interests

The authors declare that they have no competing interests.

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