

DOI: 10.21767/2254-9137.100109

# More than Half of Health Professionals Working in Peripheral areas of Southeast Ethiopia are intended to leave their Work

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Received date: April 10, 2020; Accepted date: July 24, 2020; Published date: July 31, 2020

Citation: Udessa H, Salgado WB, Yitibarek K (2020) Attitude of Health Workers (Nurses) Towards Patients and the Perception Patients Have about Them: A Case Study at Kropa Health Centre in Ghana. Health Syst Policy Res Vol: 7 Iss: 1:90.

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## Abstract

**Background:** In addition to disastrous shortage of health professionals in developing countries, turnover is very detrimental and costly for the country as well as to different organizations. Intention to leave is an immediate sign of employee's turnover. It is among the most pressing problems of health system of developing countries. However, intention to leave and its determinants were not well known in Ethiopia especially in peripheral areas.

**Objective:** The aim of this study was to assess the magnitude of intention to leave their current job and associated factors among health professionals working in Guji zone public health centers.

**Methods:** Facility based cross-sectional study was conducted among 262 health professional working in Guji zone, Southeast Ethiopia from August 13, to September 02, 2018. Intention to leave was measured with intention to leave scale tools with five-point Likert scales items. Data were analyzed using SPSS version 20 software. Both simple and multiple logistic regression models were fit to identify factors associated with intention to leave. Statistical significant association was declared at p-value less than 0.05 and 95% confidence interval. Strength of association was measured through adjusted odd ratio.

**Results:** Two hundred fifty-six (97.7%) respondents participated in the study; out of this 140(54.7%) have an intention to leave the primary health center they are working in. As a predictor intention to leave; looking for high salary (AOR=3.3, 95% CI: (1.69, 6.47), P<.000), higher education opportunity (AOR=0.45, 95%CI: (0.245, .824), P<0.02) and dissatisfaction about the availability of drugs (AOR=0.49, 95% CI: (0.294, 0.824) were significantly associated.

**Conclusion:** The overall intention to leave among health professionals was in highest proportion (54.7%). Decision

makers are supposed to focus increasing educational opportunities, financial and non-financial benefits, and equipping health centers with necessary materials and drugs to minimizing intention to leave.

**Key words:** Intention to leave; Health professionals; Public primary health Centers; peripheral area; Guji zone, Ethiopia.

## Introduction

Intention to leave is an employee's plan to quit the present job and look forward to find another job in the near future. The intention of quit is probably the most important and immediate antecedent of turnover decisions (1). The concept of intention to leave differs from turnover. Turnover refers to a voluntary separation of an individual from an organization that result from a combination of organizational events, working conditions, and psychological factors interacting with each other to affect employee attitudes in and toward the organization (2). Whereas intention to leave is individuals' perceptions towards leaving the current job and it is related to and an immediate predictor of turnover (3,4). In these days the 'crisis in human resources' in the health sector has the most urgent global health issues (5).

The global shortage of human resource for health limits access to effective health service for many people especially the poor and most vulnerable groups. It hinders progress towards health and health development goals. These human resource shortages in developing countries are not due to production of health professionals but also because of employee turnover and instability at health facilities. Workers have always tended to move in search of better living, good working conditions, improved salaries and opportunities for professional development, be it within their own country; from rural to urban areas, or from public to private (6). When health workers leave their organization, it can negatively affect the quality of care offered, accessibility and equitable distribution of health care and the organizational

performance. The organizations then will be forced to recruit new health workers and by implication tacit knowledge is lost (7,8).

Intention to leave is an immediate sign of employee's turnover. Many health facilities around the world including those in developed and developing countries have recently experienced turnover intention (7–9). Results from studies indicated that, it is sever in less developed countries (1,10,11). The health workers density in most sub-Sahara Africa (SSA) countries is far below the world health organization's (WHO's) recommendation of a minimum 2.3 health workers per 1000 population (12). Likewise, poverty, imperfect private labor markets, lack of public funds, bureaucratic red tape and political interference produce the paradox of shortages in the midst of underutilized talent (13).

According to the 2015 World Health Population report, Ethiopia, as any other SSA countries, suffers from attrition of health professionals. The country faces absolute shortfalls in their health workforce. Despite the country has high number of health workers as compared to other SSA countries, the proportion of health professionals to the population is very low, 0.84 per 1,000 people. The figure is also far below the world health organization's (WHO's) recommendation of 2.3 health workers per 1,000(14,15). This human resources for health crisis in the country is characterized by an absolute shortage of trained health workers; an imbalance in the numbers of different health worker cadres; uneven distribution of health workers between urban and rural areas; under-production of trained personnel, especially at high and mid-levels; low retention, including a "brain drain" of health workers to more developed countries that offer better compensation; and a poorly motivated health workforce (12).

Oromia regional state, the largest region of the country takes the highest share of problem related to health professionals' shortage at all levels. The rate of turnover intention among health professionals working in central part of the region was high (53.8%) as compared to other regions; for instance, Tigray (37.1) and Gambella (48.4%)(16). In the last nine years, the public health sectors of the region have lost almost 60% of its general practitioners and more than 50% of pharmacists more seriously 25% medical specialists (17,18). Shortages of health workers threaten the existence of health facility and negatively influence the quality of local healthcare services (19).

According to the reviewed documents from Guji zone human resource department, 24% of health professionals left public health centers in 2017(20). Guji zone is one of the remote zones in Oromia region where such study has not been conducted so far. Therefore, the study aimed to assess health professionals' intention to leave and associated factors for better strategies to retain health professionals.

## Materials and Methods

### Study setting and design

A facility based cross-sectional study was conducted in public primary health centers of Guji Zone from August 13 to September 02, 2018. Guji zone is one of the 20 zones found in Oromia regional state, Ethiopia. The capital city of the zone is Nagelle town which is 600 kilometers far away from Addis Ababa the capital city of the country. Administratively the zone is divided into 14 rural districts and 3 town administrations, further divided into 322 kebeles (the smallest administrative division in Ethiopia). Guji zone shares boundaries with Bale, Borena, west Guji zones Somali and Southern nations, nationalities and peoples(SNNP) regions. The zone has 2 public primary hospitals, 2 general hospital, 62 primary health centers and 283 health posts. There are a total of 659 health professionals and totally there were 1155 health workforce working in public primary health centers. There are 1,432,571 with a sex ratio of 1:1 population living in the zone according to the 2017 population projection (21).

### Population

The source population of this study were, health professionals working in public primary health centers of Guji zone. While, we have considered randomly selected health professionals working in selected primary health centers as study population.

### Variables

#### Dependent Variables

Intention to leave

#### Independent Variables

Socio-demographic characteristics: Age, sex, marital status, educational level, working experience and Profession.

**Job satisfaction:** Health workers satisfy with; compensation/benefit, work environment, recognition, relationship with manager and career development opportunity.

**Pulling factors:** Financial benefit in other organizations like, high salary and incentive, career opportunity, job opportunity and educational opportunity in other setting.

**Pushing factors:** Different factors in the current health service organization like salary, career opportunity, educational opportunity and location of institution.

**Personal Factors:** Family health problem, children education and spouse living other area.

### Operational Definitions

**Intention to leave:** It is a measurement of whether the organization's employees plan to leave their positions, thinking about quitting and intention to search for another job. It was measured with the intention to leave scale tool which consists

of 5 items on five-point Likert scales (1 = strongly disagree, to 5 = strongly agree) (22).

Finally, intention to leave responses across all items were summed and transformed to yield an overall level of intention to leave. Participants who scored greater than mean in all aspects of health workers were denoted as has intention to leave and less than or equal to mean score denoted as has no intention to leave.

**Job satisfaction:** It was measured with 14 items using five-point Likert scales from strongly dissatisfied to strongly satisfied. Participants who scored greater than mean were denoted as satisfied and less than or equal to mean were considered not satisfied.

## Data collection

The sample size for this study was 262 and it was calculated using single population proportion formula. The proportion was taken from a study done in Jimma zone ( $p=63.7\%$ ) (3). Selection of study subject was conducted through stratified sampling technique. Locations (urban and rural) were considered as strata. From a total of 62 health centers situated in Guji zone, (59 are located in rural areas and 3 in urban); We have taken 31(50%) of primary health centers; 29 from rural setting and 2 from urban. Based on the suggestion of WHO assessment tool for human resources for health (23). After selecting the facilities, the calculated sample size was proportionally allocated to the size of health professionals at each primary health center. Health professionals were selected by lottery method.

Data were collected using a self-administered questionnaire consisting of intention to leave items and possible factors deemed affecting intention to leave. Intention to leave was measured with the intention to leave scale tools adapted from relevant literature (3,10,11,13,24), which consists of 5 items on the five-point Likert scales (1=strongly disagree to, 5=strongly agree). A total of 43 question items were used to assess factors affecting intention to leave of health professionals. The items were categorized into personal, pull, push and job satisfaction factors. In the data collection field work a total of 9 (4 degrees and 5 diploma graduate) data collectors and 2 supervisors were participated.

## Data Processing and Analysis

After data collection was completed the data were entered in to Epi- data version 3.1 and exported to SPSS version 20 statistical soft-ware for analysis. The data were then cleaned and analyzed accordingly. Frequencies and percentage were used to describe relevant variables. Binary logistic regression was utilized to identify factors associated with intention to leave. We did simple logistic regression analysis to identify candidate variable for the final multiple logistic regression model. Variables with  $p$ -value  $<0.25$  were considered as candidate. Significant statistical association was declared at  $p$ -value of  $<0.05$  and its associated 95% confidence interval in the final multiple logistic regression analysis.

## Results

### Socio demographic characteristics of the respondents

A total of 256 health professionals were participated in this study, giving a response rate of 97.7%. Majority of the respondents 182 (71.1%) were male. From the study participants more than half 139(54.3%) were married. The mean age of the respondents was 27.12 (SD\_ 4.46) and median of 27 years. About 214(83.6%) respondents were between the ages of 19 and 29 years. In relation to their profession 116 (45.3%) were nurses, followed by health officer 59(23%). Regarding educational status, the majority 159 (62.1%) were diploma holders followed by first degree holders 93(36.3%). The mean monthly salary of respondents was ETB 3962.75 with the SD of 1172.5(equivalent to US\$ 141.5). Majority of the respondents 92 (35.9%) had work experience of 3-5 year and the mean service year was 3.1 and the SD 2.9(Table 1).

Variable	Category	Frequency	Percent
Age	19-29	214	83.6
	30-39	37	14.5
	>40	5	2
Sex	Male	182	71.1
	Female	74	28.9
Marital status	Single	114	44.5
	Married	139	54.3
	Divorced	3	1.2
Ethnicity	Oromo	205	80.1
	Amhara	33	12.8
	Others_*	18	6.9
Total work experience	<2	70	27.3
	3-5	92	35.9
	6-10	85	33.2
	>11	9	3.5
Service year in current health facility	<2	137	53.5
	3-6	97	37.9
	7-11	19	7.4
	>12	3	1.2
Respondent qualification	Certificate	4	1.6
	Diploma	159	62.1
	First degree	93	36.3
Respondent profession	Certificate	4	1.6
	Health officer	59	23
	Midwife all type	43	16.8

	Nurse all type	116	45.3
	Pharmacist	9	3.5
	Laboratory all type	14	5.5
	Others**	15	5.9
Respondent Salary	1651-3200	91	25.6
	3201-5250	120	46.9
	5251-7800	31	12
	7800-10900	14	5.5

Items	Intention to leave (%)
Health professionals plan to leave health centers as soon as possible.	201 (78.5 %)
Leave within the coming one year	111(43.4)
Leave after one year	108 (42.2)
Leave when they get better jobs	188 (73.4)
Plan to stay in health centers as long as possible.	55 (21.5)

## Health professions Intention to Leave

Among the total respondents, 140 (54.7%) had an intention to leave their current organization. Majority (73.4%) leave their work when they get better job. When we look at the location of health centers the magnitude of intention to leave was relatively higher in health professionals who working at rural health centers 132 (58.9%) as compare to those working in urban 8 (25%). The magnitude of intention to leave was relatively higher in males 97 (69.3%) as compared to females 43(30.7%). The highest rate of intention to leave was reported from those respondents with age group 19-29,115 (82.1%).

The magnitude of intention to leave was also higher among married 78 (55.7%), as compared to single 61(43.6%) respondents. Higher for diploma holders 83 (59.3%) as compared to degree holders 54 (38.6%). Regarding their profession, the magnitude of intention to leave was highest among nurse (all type) (45.7%) followed by health officers (25.7%). Similarly, intention to leave was higher in those with work experience 3-5years (38.6%) as compare to 6-10 years (37.1%).

While we look label of intention to leave,201(78.5) health professionals plan to leave their work as soon as possible,111 (43.4) within the coming one year, 108(42.2) agree after one year and 188(73.3%)agree to leave their work when they get better job and only 55 (21.5) plan to stay at primary health centers. Accordingly, majority of health professionals were agreed that they have plan to leave their current job.

## Reasons for intention to leave

**Personal factors:** It was found that highest proportion119 (46.5%) ofthe respondents planned to change their current job because of absence good school for their children. On the other hand, 95 (37.1%) of the respondentsstated, spouse and children live another place as a reason for their intention to leave.

**Push factors:** In relation to the push factors majority of the respondents have an intention to leave their job because of inadequate incentive 107(76.4%), inadequate salary 106 (75.7%), poorworking environment 106 (75.7%).

**Pull factors:** Looking for better career advancement opportunity 128 (91.4%), looking for high salary 125(89.3%), additional financial benefits in other organizations 117(83.6%), finding other organizations that support them 109(77.9%), looking for higher education opportunity 118 (84.3%) and transportation opportunity112 (80%) were presented as reasons for intention to leave.

**Job satisfaction factors:** Among the total respondents, 144 (56.3%) are not satisfied with their current job. 86(59.72%) were not satisfied with their current salary, 63 (43.7%) with the way the manager handle staff, 90(62.5%) with the working environment and 100(69.44%) were not satisfied with the incentives and career opportunity.

## Factors associated with health professionals' intention to leave

Prior to fit multiple logistic regression model we have conducted bivariate analysis with each of possible predictor variables, so as to identify candidates for the final model. Career advancement opportunity, organizational support, salary, transportation opportunity, incentive, financial benefit, found to be associated with health professional's intention to leave at  $p < 0.25$ [Supplementary file1].

The multiple logistic regression analysis revealed that health professionals who expect higher salary in other organization are 3.3 times more likely to have an intention to leave their current primary health centers (AOR=3.3, 95% CI: 1.69, 6.47,).Likewise, health professionals who have work experience 6-10 as well as 3-5 years were 2.22 and 2 times more likely to leave their current job compared to those work experience less than 2 years (AOR=2.22, 95% CI: 1.168, 4.2)

and (AOR=2, 95% CI: 1.06, 3.77) respectively. On the other hand, health professionals who have got educational opportunity in the current organization were 55% less likely to plan to leave their job (AOR=0.45, 95% CI: 0.245, 0.824).

Health professionals who were satisfied with the drugs availability were 51% less likely have an intention to leave compared to those not satisfied (AOR=0.492, 95%CI: 0.294, 0.824);(Table\_3).

\*\* Significant at  $p < 0.01$  \* significant at  $p < 0.05$ .

Variable	Category	Intention to leave		COR(95% CI)	(AOR,95%CI)	P-value
		Yes (%)	No (%)			
Work experience	≤2years	29(20.7)	41(35.3)	1	1	
	3-5years	54(38.6)	38(32.8)	2(1.10-3.8)	2(1.06,3.77)	0.03*
	6-10years	52(37.1)	33(28.4)	2.2(1.22-4.24)	2.22(1.17,4.24)	0.02*
	>10 years	5(3.6)	4(3.4)	1.77(0.43-7.2)	1.76(.44,7.15)	0.43
Incentive	Good	72(62.1)	44(37.9)		1	
	Poor	107(76.4)	33(23.6)	1.98(1.2-3.4)	1.38(0.73,2.63)	0.32
Look for high salary	No	83(71.6)	33(28.4)	1	1	
	Yes	125(89.3)	15(10.7)	0.3(0.15-0.59)	3.3(1.69,6.47)	0.00**
Look for career advancement	No	83(71.6)	33(28.4)		1	
	Yes	117(83.6)	23(16.4)	3.4(1.64-7.03)	1.76(0.56,5.51)	0.33
Satisfaction on drug availability	Dissatisfied	63(54.3)	53(45.7)	1	1	
	Satisfied	99(70.7)	41(29.3)	2(1.21-3.4)	0.5(0.29,0.82)	0.01*
Education opportunity	No	82(70.7)	34(29.3)	1	1	
	Yes	118(84.3)	22(15.7)	(2.22- 1.21)	0.450(0.25,0.82)	0.01*

## Discussion

Health professionals are a key capital in health service organizations where the various disciplines are the principal inputs making it possible for most health interventions to be performed. The study attempted to identify the insights, perception and opinions of health professionals on intention to leave public primary health centers.

The prevalence of intention to leave among health professionals was 54.7%, out of these 43.4% want to leave within one year, 42.2% after one year and 73.4% intended to leave when they get better job. This finding is comparable with a study conducted in Gambella which was (48.4%) (1,10). Compared with other studies in Africa the finding is very high. For example, the rate is higher than the findings of Tanzania (18.8%), Malawi (26.6%) and South Africa (41.4%) (1). Various explanations can be given for this difference. Despite salary given to health professionals working in public health facilities of SSA is minimal, the Ethiopia's is very low as compared to other African countries (23,24). There is also low educational level and opportunities for the health workforce of the country (27). On the other hand, this finding is lower than study done in Ethiopia for example in east Gojjam (59.4%), Jimma zone health centers (63.7%) and Horo Guduru Wallega zone (65%) (3,6,28). This difference might be due to variation in work load and organizational management. For instance in Jimma health centers work pressure was significantly

associated with intention to leave (3), but not in Guji zone health centers. When the work experience of the health professional increase they are much more interested in leaving their current primary health center. The study revealed that if their work experience is greater than three years they are more than three times more likely have an intention to leave their current organization. As experience increase especially for those working in rural health centers, they will be eligible to compete in various posts in urban areas. On top of this in Ethiopia especially for university graduates, there is a cost sharing approach. University graduates are expected to pay back expenses the government incurred when they were in school. There is a special approach for health professionals and teachers, by which they have to serve not less than two years where they are assigned by the government.

Health professionals are expected to serve in a health facility, they are assigned for by ministry of health for not less than two years. The expected service years may vary according to their profession and the location they are assigned. Therefore, they are less likely to have an intention to leave their health center before two years.

This finding was in line with study conducted in Gonder which confirms that, health professionals who have work experience of 2.1 - 5 years were 1.94 times more likely to have intention to leave than with work experience of less than two years (12). We came across with different result in Gambella. Accordingly, intention to leave was higher in those with work

experience less than or equal to 2 years (56.3%) as compared to those greater than (2-4) years (31.7%) (10). This might be attributed to the hot climatic condition in Gambella that can be difficult to adapt within short period of time. As in this study, many other studies also come up with expecting high salary from other working areas as a predictor for intention to leave the current public health facility (6,10). There are various non-Governmental Organizations intervening on health issues especially in peripheral areas like Guji and Gambella. Therefore, health professional intended to work with these organizations that have higher salary scales. Health systems cannot function without trained health workers. Yet until recently researchers and policy makers paid relatively little attention to their role in developing countries (29). This may be due to the inherent complexities, economy and limited availability of trained health professional data. In this finding the respondents who didn't interested to get higher education opportunity were 55% less likely intended to quit their current job, as compared to those interested to get higher education opportunity.

## Conclusion

This study revealed that, there is a high level of intention to leave among health professionals working in Guji zone public primary health centers. Higher years of work experience, looking for higher salary and better educational opportunity have increased health professionals' intention to leave. On the other hand, those satisfied with drug availability have low intention to leave the primary health center they are working in. In response to high magnitude of health professionals' intention to leave their current job in peripheral areas, all the respective health system authorities have to give special attention for these areas. A retention mechanism focused on additional educational opportunity, financial and non-financial benefits, and equipping health centers with necessary materials and drugs will have an effect in minimizing intention to leave.

## Declaration

### Ethics approval and consent to participate

Ethical clearance was obtained from Jimma university institute of health ethical review board. Furthermore, letter of permission was obtained from Guji zonal health department. Before the questionnaires were filled, each respondent was informed the aim of the study and verbal informed consent was obtained. Personal identifiers were not requested from the respondents to keep confidentiality.

### Competing interest

All author declare that they have no conflict of interest

### Authors' contributions

HU designed the study coordinated data collection, analysis, interpretation, write up, and drafted the manuscript. WB

participated in study design and critically revised the report and manuscript, KY participated in study design and critically revised the report and manuscript. All authors read and approved the final version of the manuscript.

## Acknowledgement

We would like to acknowledge Jimma University for funding data collection of this study. We are also thankful to all the study participants, data collectors and supervisors.

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