

Predictors of Intention-To-Leave the Current Job and Staff Turnover among Selected Health Professionals in Ethiopia

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Abstract

Background: Intention to leave a job negatively affects the quality of work in the form of withdrawal, declining participation, absenteeism, avoidance behavior and result in decreased performance ultimately. Methods: Institution based cross-sectional study was conducted in Horo Guduru Wollega zone, northwest Ethiopia. An institution based cross-sectional study was conducted using quantitative and qualitative data collection methods. The study participants were full time health professionals holding diploma and above qualification. The sample size for quantitative study was determined using single population proportion formula by considering the proportion of health workers intention to leave of 83.7

Index terms— turnover, intention to leave, health professionals, wollega, ethiopia, sub-sahara africa.

Abstract-Background: Intention to leave a job negatively affects the quality of work in the form of withdrawal, declining participation, absenteeism, avoidance behavior and result in decreased performance ultimately.

Methods: Institution based cross-sectional study was conducted in Horo Guduru Wollega zone, northwest Ethiopia. An institution based cross-sectional study was conducted using quantitative and qualitative data collection methods. The study participants were full time health professionals holding diploma and above qualification. The sample size for quantitative study was determined using single population proportion formula by considering the proportion of health workers intention to leave of 83.7% from study conducted in Yirgalem and Hawassa ,southern Ethiopia, 95 % confidence level and 0.05 margin of error. One town administration and four districts were selected randomly by lottery method and the sample size was proportionally allocated to each selected facility. We randomly selected the study participants from the facilities' by using the human resource department list and indepth interview was conducted with two hospital administrators and 16 heads of health centers. A self administered, structured questionnaire was administered to the health professionals.

Results: Three hundred sixty two health professionals participated in the study out of which 222 (60.8%) respondents were males and 284(78.5%) were from health centers. Majority (65%) of the health workers have intention to leave their current health institution. Of these 211(74.3%) were from health centers and 49 (25.7%) were from hospital. Intention to leave was associated with professional category ($\chi^2=0.916$), service year in health sector ($\chi^2=0.474$), salary ($\chi^2=-0.044$), satisfaction with management system ($\chi^2=-0.333$), compensation and benefit ($\chi^2=0.134$) and work environment ($\chi^2=0.138$).

Conclusions: Majority of health professionals intended to leave their current job. Professional category, Management system, Salary and benefits and Working environment were predictors of intention to leave. Thus it was recommended that the working environment and benefit packages should be improved to retain health workers.

In the era of globalization, employee turnover is a persistent problem in organizations. It is common in every type and size of organization and at every organizational level. High turnover causes high cost of recruiting and training new employees, decrease organizational performance and results in lack of employee continuity and organizational stability (Z. Siong2006 et al, K. Ramesh 2012et al). Turnover is an undesirable event in the organizations, because longterm productivity is affected not only by hiring the best qualified personnel, but also by retaining them for a longer period of time (H. Rasch, Ronald 1991).

I

The reasons behind the turnover decision have been investigated for years. Literatures showed that the main factor that affected employees to quit their current jobs was the intention itself (Z. Siong2006 et al, K. The more an individual shows intention to perform a particular behavior, the more he or she is expected to act it (I. ??adden, et al.2006).

The global shortage of human resources for health limits access to effective health services for many people, especially the poor and most vulnerable groups. It hinders progress towards health and health development goals. It is estimated that there is a shortage of 4.2 million health workers worldwide (A. Kiros, T. Gebeyaw, E. Tadesse.2013). Out of 57 countries experiencing critical shortage of human resource for health in the world, 36 are located in Africa. The shortage is most severe in Sub-Saharan African countries; thus, these countries will meet few of the health development goals as a result (WHO. 2006).

In developing countries human resource shortages are not only 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 sector and/or from one country to another. Movement of health workers usually result in a loss of capacity of the health system to deliver health care for all peoples equitably (B. Stilwell, K. Diallo, P. ??urn et al.2003). Employee turnover jeopardizes organization's strategic plan to achieve its objectives, reduce innovation, affect quality of customer services and affect morale and motivation of remaining employees (A. Ayinde, A.Titus, A. Adegroye. 2012). It is very costly for an organization and the cost is due to termination, advertising, recruitment, selection, and hiring new employees (B. ??aur.2013).

In Ethiopia, despite the rapid expansion of health training institutions and the production of health professionals, the gain made is offset by annual losses and the national ratio of health workers per 1000 population is 0.84. This is far less than the standard set by world health organization of 2.3 health workers per 1000 population(Africa Health Workforce Observatory (AHWFO).2015).

The other problem related to human resource in the country is health professionals mal distributed between urban and rural areas. From physicians and nurses, 46% physicians and 28% nurses are working in the capital city. Whereas large regions such as Oromia, Amhara and SNNPR which account for 95% of the country's population have only 15%, 18% and 16.7% of physicians respectively (Africa Health Workforce Observatory (AHWFO).2015, Peru Ministry of Health 2010). The shortage and imbalance in the supply, deployment and composition of the health workforce is an obstacle to the effectiveness of the country's core health systems and services. In addition, intention to leave negatively affected the quality of work. an employee who consider to quite his/her current job withdraw and decline participation in a job, manifest itself as lateness, absenteeism, avoidance behaviour, and lowered performance by affecting the commitment level of employees (M. Kivimäki, A. Vanhala, J. Pentti et al. 2007). There are few studies about health workers intention to leave in Ethiopia. Therefore, this study assessed intention to leave the current job and staff turnover among health workers.

II.

3 Methods and Materials

The study was conducted in Horo-Guduru Wollega zone public health facilities, from February 15 to 30/ 2015. Horo Guduru Wollega is one of the zones of Oromia regional state, Ethiopia. It has a total population of 715,222; of these 51% were male. There were nine woredas and one town administration in the zone. There were around 954 healthcare professionals working governmental health facilities.

An institution based cross-sectional study was conducted; both quantitative and qualitative data collection method was employed. The study participants were full time health professionals holding diploma and above qualification who had 6 months and above work experiences. The sample size for quantitative study was determined using single population proportion formula by considering the proportion of health workers intention to leave of 83.7% from study conducted in Yirgalem and Hawassa, southern Ethiopia, 95 % confidence level and 0.05 margin of error. We used a correction formula for finite population as our source population were less than 10,000 and found calculated sample size of 172 and added 5% non-response rate and multiplied by 2 as we used multistage sampling method to select the study facilities.

The total sample was 362 health professionals.

One town administration and four districts were selected randomly by lottery method from a total of nine and one hospital and 16 health centers were included. Then the sample size was proportionally allocated to each selected facility. We randomly selected the study participants from the facilities' by using the human resource department list of health professionals after excluding those who do not fulfill inclusion criteria.

In addition, in-depth interview was conducted with two hospital administrators and 16 heads of health centers.

We used field tested questionnaire for data collection. The questionnaire has different sessions such as, socio-demographic characteristics of respondents, 23 job satisfaction items, 15 working and living conditions items, 9 items on compensation and benefits and 6 items on intention to leave. Except the socio-demographic characteristics, questions were on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The questionnaire prepared in English was translated to Afan Oromo (the local language) and retranslated

back into English to ensure its consistency. We conducted pretest on 5% of sample size pretest outside the study area. Moreover we used checklist to abstract data from human resource documents to calculate turnover rate.

Interview guide was used to conduct in-depth interview with managers. Five diploma graduated health professionals who speak the local language and working outside the study health centers collected the data with support of two degree holder supervisors by conducting in-depth interview. Data collectors were trained for one day.

Our dependent variable was intention to leave the current job and independent variables were socio demographic characteristics (age, sex, gender, income, education, profession), job satisfaction (benefit and salary, professional training, recognition at work, management/supervision, promotion, person misplacement, appraisal, value, safety, moral), working and living condition (work load, type of institution, supplies and equipment, cleanliness, accessibility to clean water, electricity, internet, transport and telephone, shopping and entertainments), compensation and benefits (terminal benefit, allowances).

Quantitative data was entered into EpiData v3.1 and exported to SPSS version 21 for analysis. For the socio-demographic characteristics descriptive statistical analysis were used. Principal component analysis was employed for all likert scale instruments to extract factor(s) representing each of the scales and have factor scores. Multiple linear regression analysis was done to identify determinants of health workers intention to leave from current job. A significance level of 0.05 was used as cut of point. Interview with key informants was taperecorded and transcribed and translated to English. Then we categorized it into themes and triangulated with quantitative data. Ethical approval was obtained from Ethics Review Committee of College of Health Science of Jimma University and verbal consent was obtained from study participants during data collection.

4 III.

5 Results

6 a) Sociodemographic characteristics of study participants

A total of 362 health workers responded to questionnaire. From these, 222 (60.8%) respondents were male and majority of them (65.2%) were married. The mean age of the respondents was 27.89 ± 6.14 years. Majority 304 (84%) were Oromo Ethnic group. Two hundred twenty three (61.6%) were protestant followed by 91(25.1%) Orthodox. More than half (57.5%) were diploma graduates and 144(39.8%) were degree holders. Majority (59.1%) of the respondents were nurses. Hundred ninety three (53.3%) respondents' monthly salary ranges from 2000 to 4000 Ethiopian Birr (Table 1). b) Health professionals' intention to leave Overall, 235(65%) of the health workers agree with a statement that they would leave their current job in the near future, of these 193(82%) from health center and 42 (18%) health professionals were from the hospital. From the study participants who intend to leave their current job majority, 83% were from other professional categories (environmental health, x-ray technicians), (72%) were health officers, and 50% were physicians. Overall, 65% of health professionals plan to leave while only 13% disagree on a statement that they will leave their current jobs (Figure 1).

7 c) Level of job satisfaction

Only 44% of the respondents were satisfied with their job. Nearly 42 % of respondents were dissatisfied with their current job. Regarding satisfaction by specific items, Majority (64%) of respondents were satisfied that community valued their work and nearly the same percent were satisfied that they feel part of the local community. However, (65%) of respondents were dissatisfied by salary package and (63%) were dissatisfied by fairness of salary compared with other colleagues (Table 2).

8 d) Working and living conditions of respondents

For one hundred seventy eight (49%) of health professionals, the work load in their current job is beyond logically bearable level. One hundred seventy four (48.1%) respondents agreed that they were getting sufficient supply needed to do their job. About two fifth (39.2%) respondents agreed to access to drug and medication when they need them. More than half (57%) of the study participants were agreed with the cleanliness of their work spaces. On the contrary, 194(53.5%) respondents disagree with the availability of safe and clean water at their home and 257(71%) do not worried about losing their job (Table 3).

9 e) Predictors of intention to leave the current job

We explored predictors of intention to leave using regression analysis techniques. Accordingly, first, we did simple linear regression analysis and variables showing association at p value <0.25 were taken as candidates for multiple linear regression analysis. From all predictor of intention to leave, professional category, service year in health sector, salary, satisfaction with management system factor score, compensation and benefit factor score and work environment factor score showed statistically significant association with intention to leave. Health workers who are physicians in profession had .916 units more intention to leave than health workers who are nurses or mid wife in profession ($\beta=0.916$, 95%CI: 1.68, 0.19). Health workers who have greater than or equals to 11 years service year in health sector had 0.47 lower intention to leave than those health workers who had 1 to 5 service years

in health sector ($\beta = -0.474$, (95%CI: -0.867, -0.080). Satisfaction with management system of health facility was inversely related to intention to leave ($\beta = -0.33$), that is as satisfaction with the management system of health professionals' increase by a unit, intention to leave lowered/decreased by 33% ($\beta = 0.33$ 95%CI: -.428, -.238). Health professionals who consider compensation and benefit from their institution had .134 units more intention to leave health facilities than those who did not consider ($\beta = 0.134$, 95%CI: .040, .229). Poor working environment was directly related to intention to leave ($\beta = 0.138$), that is as dissatisfaction with working environment increased a unit intention to leave increased by .138 (95%CI: .025, .653). Salary was inversely associated to intention to leave ($\beta = -0.044$), as salary increased a unit intention to leave decreased by .044 (95%CI: -0.273, -0.184) (Table 4).

10 Global Journal of Management and Business Research

Volume XVII Issue II Version I Year () to all professionals category. The turnover rate with professional category was 75% for medical doctors 60% for MPH, 84% for environmental health, for pharmacy 25.3%, Health officer 46.7%, Laboratory 26.2% and nurse 8.5%.A

11 g) Turnover of health professionals by year

With regard to the overall turnover, higher turnover was observed in the years 2012 (30%) and 2013 (22%) but trend did follow progressive decreasing or increasing order in the study period (Figure 2).

12 h) Reason for leaving the public health sectors

The main reason for health professionals' turnover from each health facility and by professionals, resignation was 65% among total turnover of health professionals from public health sectors and followed by 23% for retirement. Resignation was the leading reason for turnover of health professionals from public health institutions in the zone. For pharmacy 45%, environmental health 52%, physicians 35%, Nurse 46% and Laboratory professionals 91.2%, while the leading cause of turnover among health officers and others (like x-ray and anesthesia) was resignation and upgrade education.

IV.

13 Discussion

This study clearly demonstrated that, magnitude of health workers turnover was very high which 19% per year was. In this regard health facilities spend their resource to recruit and train the lost health work force resources every year. But when we compare it to other studies such as a study on staff turnover in Bahr-dar the finding was lower (A. Kiros, T. Gebeyaw, E. Tadesse.2006). Considering poor documentation of human resources status in the health facilities the number of staff turnover could even be higher.

The prevalence of health workers intention to leave public health facilities of the zone was 65%. This staggering finding is a challenge for the stability and effectiveness of any organization. But the finding is not unique to this area. Studies conducted in Hawassa and Yirgalem hospitals reported that among health workers 83.7% of them intend to leave (G.Nenko, P. 2014). But the finding in this study was higher than a study conducted in Sidama zone which reported a 50% intention to leave among health professionals (A. Asegid, T. Belachew, E. Yimam.2014). The difference could be due to the fact that Sidama zone is located near to the Regional City, Hawassa, where facilities and infrastructure is better than our study area. Compared with other studies in Africa the finding is very high. For example, in South Africa intention to leave was 41.4%, Malawi 26.5% and Tanzania 18.8% (D. Blaauw, P. Ditlopo et al.2013). The difference may be attributed to difference in socio economic, characteristics, payment packages and governance among these countries.

Intention to leave was highly influenced by professional category, service year and salary from respondents' characteristics and also influenced by management system, compensation and benefit and work environment factor score. This study clearly demonstrated that intention to leave was higher among health professionals who were physicians in profession compared to those who were nurses or midwife. The difference was also found to be statistically significant ($\beta = 0.916$, [95%CI: ??638, .193]). This finding is comparable with other studies which were conducted in different parts of the country and elsewhere in developing countries (A. ??iros On the other hand, health workers who have service year of greater or equals to 11 years had lower intention to leave than those health workers who have 1-5 years. The result was also found to be statistically significant ($\beta = -0.474$, 95%CI: -.867, -.080). This finding is contradict with the study done in Bahirdar depicted that, health professionals with work experience 11 and above years were more intention to leave compared with health professionals who have work experience less than 5 years (AOR: 4.22, 1.85, 9.64)(8). The difference might be due to different opportunity for NGO mentorship which needs more experienced personnel in the area but in our case, the difference might be due to poor working environment.

But, our finding supported with qualitative study in that most informants said ". . . as years of experience goes on the chance of attaining marriage increases and as the same time they will tied with social relationship and they tend to stay here."

Again in this study, salary was negatively associated with intention to leave ($\beta = -0.044$, $P = 0.037$) which is as salary of health professionals increased a unit intention to leave decreased by 0.044 (95%CI: -0.273, -0.184).

This finding is quite comparable with other studies which were conducted in the country (A. Kiros, T. Gebeyaw, E. Tadesse.2006, G.Nenko, P. Vata.2014, A. Yami, L. Hamza, A.2011). For example study done in Hawassa and Yirgalem hospital revealed that those who satisfied with their present monthly salary are less likely to leave the health facility than those who dissatisfied (16). One Interviewee answered supporting our finding: "...diploma holders are not well compensated during salary adjustment ... but other professionals were fevered during salary adjustment. Therefore the salary gap between degree holders and diploma holders is high. On other hand diploma holders also worry about further education as there is no curriculum for 10+3 graduates. This cause dissatisfaction with their job which cause turnover..." Satisfaction with management system was negatively associated with intention to leave ($\beta = -.333$, $P=0.001$). Health workers who were satisfied with management system of health facilities had lower intention to leave ($\beta = -0.333$, [95%CI: -.428, -.238]). This finding is in line with other studies which was conducted in Sidama zone satisfaction which was negatively correlated ($\beta = .242$, $95\%CI = .0.23, .429$), with intention to leave the organization (A. Asegid, T. Belachew, E. Yimam.2014). Compensation and benefits such as allowances directly affect intention to leave. As expectation for compensation and benefit increased a unit, intention to leave of health workers increased by 0.134($\beta = 0.134$, [95%CI: .040, .229]). The result is in line with study done in Uganda in which health workers intention to leave influenced by compensation and benefit packages they have to get (Ministry of Health. 2007). The finding was supported by in-depth interview in which almost all respondents said that health workers leave and plan to leave their job as a result of low payments and housing, risk and professional allowances.

Poor working environment was directly related to intention to leave ($\beta = 0.138$), as dissatisfaction with working environment increased a unit, intention to leave increased by .138 ($\beta = 0.138$, [95%CI: .045, .230]). This finding is consistent with study done in Sidama zone in that, the environment that enables workers to fulfill their utility at home and at work, the level of health workers turnover was low, those satisfied with working environment and group cohesion were less likely to have intention to leave (A. Asegid, T. Belachew, E. Yimam.2014). This is also the case in most developing countries where public health facilities in general are characterized by poor infrastructure (A. Asegid, T. Belachew, E. Yimam.2014, M. Tei-tominaga, A. Miki.2010, Z. Yimin, X. Fang.2011). Almost all who participated in the interview said that everybody looks after good incentive but turnover tends to be higher among workers far from urban areas especially from rural health centers due to lack of infrastructures.

In conclusion, our study indicated that health professionals' turnover was a major in public health facilities. Majority of health professionals working in zone intend to leave their current public health facilities which can greatly affect the quantity and quality of health services. Intention to leave was associated with professional category, work experience and salary. Moreover, satisfaction with management system, working environment and compensation and benefit packages were strong predictors of intention to leave. Thus it was recommended that the working environment and benefit packages should be improved to retain health workers.

14 Declaration of conflict of interest

There is no competing conflict of interest with the presented data as external data collectors collected it. There was not financial interest b/n the funder and the research area community and us. We, the researchers, have no any form of competing financial and nonfinancial interest between ourselves.

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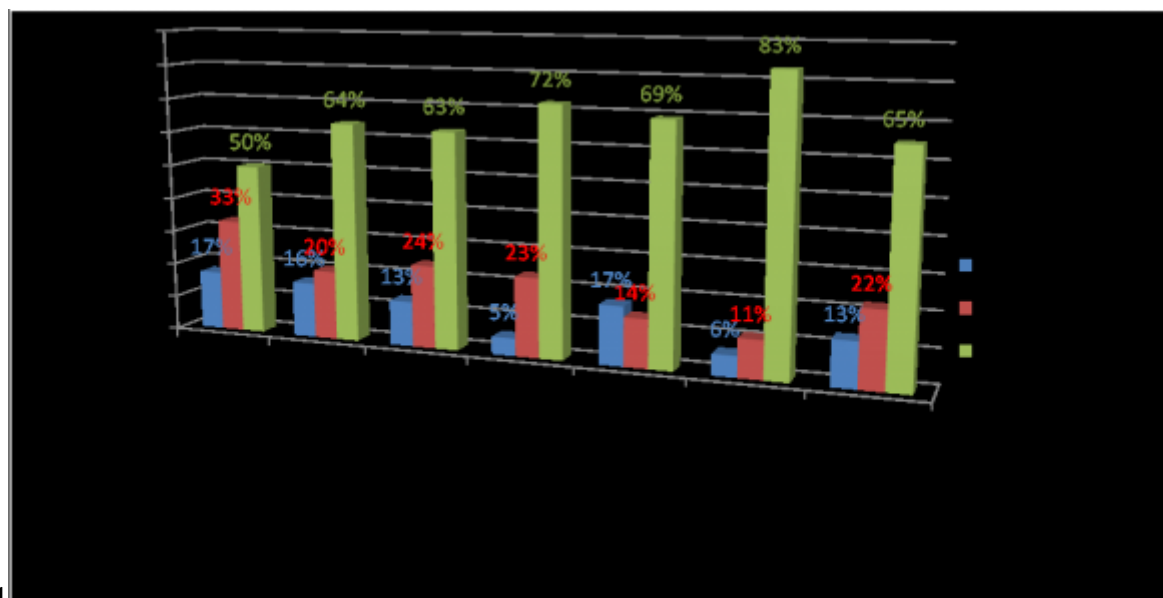


Figure 1: Figure 1 :

Figure 2:

Figure 3:

258

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⁴Predictors of Intention-To-Leave the Current Job and Staff Turnover among Selected Health Professionals in Ethiopia

1

Respondents' characteristics		Frequency	Percentage
Types of health facility	Health center	284	78.5
	Hospital	78	21.5
Age	<25	157	43.4
	25-29	119	32.9
	30-34	55	15.2
	35-39	21	5.8
	>40	10	2.8
Sex	Male	220	60.8
	Female	142	39.2
Birth place	Rural	339	66
	Urban	123	34
Monthly salary	< 2000	106	29.3
	2001-4000	193	53.3
	>4001	63	17.4
Upgraded/specialized	Yes	62	17
	No	300	83
Current obligation	Yes	141	39
	No	221	61
Ethnicity	Oromo	304	84
	Amhara	39	10.8
	Others	19	5.2
Religion	Protestant	223	61.6
	Orthodox	91	25.1
	Muslim	25	6.9
	Catholic	17	4.7
	Others*	6	1.7
Marital status	Married	236	65.2
	Single	114	31.5
	Divorced	10	2.8
	Widowed	2	0.6
Educational Qualification	Diploma	208	57.5
	Degree	144	39.8
	Masters/specialiy and above	10	2.7
Professional categories	Nurses /Midwife	214	59.1
	Health officers	42	11.6
	Laboratory technologist	41	11.3

[Note: **Others from professional categories include: Environmental health, anesthesia, and x-ray technicians.]

Figure 4: Table 1 :

2

Northwest Ethiopia, 2015				
S.N	Subscales	Dissatisfied Freq (%)	Neutral (%)	Freq Satisfied Freq (%)
1	Salary package	235(65)	66(18.2)	61(16.8)
2	Fairness of salary when compared to other staffs	228(63)	41(11.3)	93(25.7)
3	Opportunity for promotion	129(35.6)	56(15.5)	177(48.9)
4	Recognition for doing good work	125(34.5)	61(17)	176(48.5)
5	Work plan developed with supervisor	112(31)	49(13.5)	201(55.5)
6	Annual performance appraisal based on my work plan	135(37.3)	40(11)	187(51.7)
7	Organization value my work	126(35)	62(17)	174(48)
8	Family and friend encouragement	123(34)	32(9)	207(57)
9	Part of local community	85(23.5)	47(13)	230(63.5)
10	Community value my work	71(20)	59(16)	232(64)
11	Team spirit	128(35.4)	59(16.3)	175(48.3)
	Overall satisfaction	41.6%	14.4%	44%

Figure 5: Table 2 :

3

S.N	Variable	Freq (%) Agree	Freq (%) Neutral	Freq (%) Disagree	Freq (%) Not applicable	Mean + SD
1	Work load is reasonable	86(24)	88(24.3)	178(49)	10(2.8)	3.53+ 1.5
2	Supply needed to do job	174(48.1)	86(23.7)	89(24.6)	13(3.6)	3.6+ 1.6
3	Access to drug and medication	142(39.2)	107(29.6)	101(28)	12(3.3)	3.3+ 1.6
4	Clean work space	205(57)	95(26)	59(16)	3(0.8)	3.6 + 1.17
5	Safe and clean water at home	111((31)	56(15.5)	194(53.5)	1(0.2)	2.7 + 1.5
6	No worry for losing job	257(71)	29(8)	52(14)	24(7)	4.33 + 1.8

Figure 6: Table 3 :

	No (%)	Un- stan- dard- ized Co- effi- cients B	Standard Co- effi- cients Beta	Size d	95% Confidence Interval for B
(Constant)		.059		.773	(-.459, .341)
Types of health facilities					
Health center	284(78.5)				
hospital	78(21.5)	.019	.008	.887	(-.241, .279)
Sex					
Male	220(60.8)				
Female	142(39.2)	.078	.038	.447	(-.124, .281)
Marital status					
Single	114(31.5)				
Ever married	248(68.5)	-.070	-.033	.152	(.152, -.292)
Birth place					
Rural	339(66)				
Urban	123(34)	-.080	-.038	.442	(-.286, .125)
Educational qualification					
Diploma	208(57.5)				
Degree and above	154(42.5)	.033	.016	.816	(-.242, .308)
Professional category					
Nurses or midwife	214(59.1)				
Physician	6(1.7)	.916	.117	.013	(.193, 1.638)
Pharmacy	37(10.2)	.065	.023	.652	(-.220, .351)
Health Officer	42(11.6)	.145	.045	.432	(-.218, .507)
Laboratory	41(11.3)	.173	.051	.310	(-.162, .509)
Others profession	22(6.1)	.368	.080	.122	(-.099, .835)
Service year in health sector					
1-5 years	212(58.6)				
6months -<1year	43(11.9)	-.515	-.085	.073	(-1.078, .048)
6 -10 years	93(25.7)	.048	.021	.781	(-.293, .389)
> 11 years	14(3.8)	-.474	-.153	.019	(-.867, -.080)
Service year in current institution					
1-5 years	222(61.3)				
6months -<1years	76(21)	.339	.138	.053	(-.025, .653)
6-10 years	57(15.7)	.011	.004	.954	(-.350, .371)
>11 years	7(2)	.585	.068	.327	(-.587, 1.757)
Compulsory services					
No	221(61)				
Yes	141(39)	.031	.015	.783	(-.191, .253)
Up graded/specialized					
No	300(83)				
Yes	62(17)	.001	.000		.995 (-.294, .296)
Salary	-	-.044	-.030		.037 (-.273, -.184)
Management system	-	-.333	-.333		.000 (-.428, -.238)
Compensation and benefit	-	.134	.134		.005 (.040, .229)
Work environment	-	.138	.138		.004 (.045, .230)
Long hour work	-	.096	.096		.064 (-.002, .191)

R=0.478, R square = 0.228, AR square=0.211⁹, VIF <10, Tolerance > 0.1

*Other professions include; environmental health, health education and anesthesia

f) Health professionals' turnover from public health

Figure 8:

.1 Acknowledgements

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