

Turnover and intention to leave and associated factors among health workers in Horo guduru wollega zone public health facilities, Northwest Ethiopia

A Research Submitted to Jimma University College of Health Sciences, Department of Health Economics, Management, and Policy for the Partial Fulfillment for the Requirement for Master of Public Health in Health Services Management (MPH-HSM).

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Abstract

Background: Shortage of human power due to turnover of health workers has significantly compromised the efficiency of delivery and quality of health services. Intention to leave negatively affects the quality of work in the form of withdrawal, declining participation in a job, predisposes to lateness, absenteeism, avoidance behaviour, and decreased performance by affecting the commitment level of employees. The study was conducted in the zone since no prior study was done in the zone and helps identify main factor that contribute for turnover.

Objectives: To assess turnover and intention to leave and associated factors among health workers in Horo Guduru Wollega zone public health facilities.

Methods: The study was conducted in Horo Guduru Wollega zone from February 15 to 30/2015. Institutional based Cross-sectional study design that used both quantitative and qualitative method of data collection. A total of 362 randomly selected health professionals from one town administrative and four woredas were included in the study. Data was collected by structured and self-administered questionnaires that rated with 5-point Likert scale. The data was entered into EpiData version 3.1 and analyzed using SPSS version 21. Descriptive, linear regression was employed to analyze the data. Qualitative data was transcribed and analyzed in thematic areas and then triangulated with quantitative data.

Result: The prevalence of turnover of health professionals were 19%. The main reason was resignation (65%) followed by retirement. The majority 235(65%) of the health workers intent to leave their current health institution, of these 193(82%) were from health center and 42 (18%) from hospital. Furthermore, intention to leave was associated with professional category that physicians are more intend to leave than nurse/midwife ($\beta=0.916$), service year in health sector ($\beta=0.474$), and salary ($\beta=-0.044$) from respondents' characteristics. Also, satisfaction with management system factor score ($\beta=-0.333$), compensation and benefit (.134), work environment factor score ($\beta=0.138$) were found to be affecting the intention to leave

Conclusion: Higher levels of level of intention to leave public health facilities were associated salary of health professionals, professional category, satisfaction with management system, low benefit and compensation, and working environment. Hence, we recommend that Horo guduru wollega zone and Oromia regional health bureau should give attention for management and working condition of health facilities as well as for benefits and compensation to retain health workers. Ministry of health should increase salary of health professionals.

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Contents

| | |
|--|------|
| Abstract..... | II |
| Acknowledgement | III |
| List of table | VII |
| List of figure | VIII |
| Abbreviations..... | IX |
| Chapter One: Introduction | 1 |
| 1.1. Background..... | 1 |
| 1.2. Statement of the problems..... | 2 |
| Chapter Two: Literature Review..... | 4 |
| Conceptual Framework..... | 7 |
| Significance of the Study..... | 8 |
| Chapter Three: Objective..... | 9 |
| 3.1. General Objective. | 9 |
| 3.2. Specific Objectives | 9 |
| 3.3. Hypothesis..... | 9 |
| Chapter Four: Method and Materials..... | 10 |
| 4.1. Study Area and Period | 10 |
| 4.2. Study Design | 10 |
| 4.3. Populations..... | 10 |
| 4.3.1. Source population | 10 |
| 4.3.2. Study Population..... | 10 |
| 4.4. Inclusion and Exclusion Criteria..... | 10 |
| 4.4.1. Inclusion criteria: | 10 |
| 4.4.2. Exclusion criteria: | 11 |
| 4.5. Sample Size determination and sampling technique..... | 11 |
| 4.5.1. Sample Size..... | 11 |
| 4.5.2. Sampling technique..... | 11 |

| | |
|--|----|
| 4.6. Variables | 14 |
| 4.6.1. Dependent variables..... | 14 |
| 4.6.2. Independent variables | 14 |
| 4.7. Data collection procedure | 14 |
| 4.8. Operational Definition | 15 |
| 4.9. Data analysis procedure | 17 |
| 4.10. Data quality management..... | 17 |
| 4.11. Ethical consideration..... | 18 |
| 4.12. Dissemination plan..... | 18 |
| Chapter Five: Results | 19 |
| 5.1. Respondents characteristics of respondents..... | 19 |
| 5.2. Magnitude of health professionals’ turnover from public health | 21 |
| 5.3. Turnover of health professionals by year | 21 |
| 5.4. Ways of leaving the public health sectors | 22 |
| 5.5. Level of health professionals’ intention to leave..... | 23 |
| 5.6. Level of intention to leave by professional categories | 24 |
| 5.7. Level of job satisfaction | 25 |
| 5.8. Working and living conditions of respondents..... | 26 |
| 5.9. Importance of compensation and benefits for health workers..... | 26 |
| 5.10. Crombach’s alpha and mean of factors extracted from factor analysis..... | 27 |
| 5.11. Socio-demographic predictor of intention to leave..... | 28 |
| Chapter Six: Discussion | 33 |
| Chapter Seven: Conclusion and Recommendation..... | 36 |
| 7.1. Conclusion..... | 36 |
| 7.2. Recommendation..... | 36 |
| 7.3. Limitations of the study..... | 37 |
| References..... | 38 |

| | |
|--|----|
| Annexes | 41 |
| 1. Questionnaires in English Language..... | 41 |
| 2. Questionnaires in Afan Oromo Language..... | 54 |
| 3. Variables loaded by Principal Component analysis..... | 70 |

List of table

| | |
|---|----|
| Table 1: Respondents characteristics of health professionals in Horo Guduru Wollega zone public health facilities, 2015..... | 19 |
| Table 2: The levels of intention to leave public health facilities of health workers in Horo guduru wollega zone, 2015..... | 23 |
| Table 3: Frequency and percentage distribution of responses on job satisfaction subscale, Horo guduru wollega zone public health facilities, 2015..... | 25 |
| Table 4: Frequency and percentage distribution of responses on working and living conditions subscale, Horo guduru wollega zone public health facilities, 2015. | 26 |
| Table 5: Frequency distribution of responses on importance of compensation and benefit subscale, among health workers in Horo guduru wollega zone public health facilities, 2015..... | 27 |
| Table 6: Description of factor score of health workers in Horo Guduru Wollega zone public health facilities, 2015..... | 27 |
| Table 7: Socio-demographic predictors of intention to leave public health facilities among health workers in Horo Guduru Wollega zone, 2015. | 28 |
| Table 8: Factors that predicting intention to leave public health facilities among health workers in Horo guduru wollega zone, 2015..... | 30 |

List of figure

| | |
|--|----|
| Figure 1: Conceptual frame work for intention to leave public health facilities, developed after reviewing different literatures, 2015..... | 7 |
| Figure 2: shows the schematic sampling procedures for health workers from Horo guduru wollega zone health facilities, 2015. | 13 |
| Figure 3: Health professional’s turnover from public health facilities in Horo Guduru Wollega zone for last five years (2010-2014) in percent..... | 22 |
| Figure 4: Reason of Health professional’s turnover from public Health in Horo guduru wollega zone (2010-2014) in percent..... | 23 |
| Figure 5: Frequency of intention to leave by profession among Horo Guduru Wollega zone public health facilities, 2015..... | 24 |

Abbreviations

| | |
|------------|--|
| Ay | Ayele health center |
| Bab | Babela Health center |
| Ba..... | Baro health center |
| CI..... | Confidence interval |
| Cho | Chomen health center |
| Ded | Dedu health center |
| FGD..... | Focused group discussion |
| Fi..... | Fichaa health center |
| Gl | Geba lega health center |
| Gob | Goban health center |
| HC..... | Health center |
| Hosp | Hospital |
| HRH..... | Human resource for health |
| HSDP..... | Health sector development plan |
| Ho | Homi health center |
| Ko | Kombolcha health center |
| L/q | loya kidame health center |
| JU..... | Jimma University |
| Maz | Mazora health center |
| MSQ..... | Minnesota satisfaction questions |
| NGO..... | Nongovernmental organization |
| SNNPR..... | South nation nationality and popule region |
| SPSS..... | Statistical package of social science |
| OR..... | Odds ratio |
| Qa | Kewo health center |
| Qn | kanate biya health center |
| Shu | Shumbo health center |
| Tg..... | Terkanfeta Gino health center |
| US..... | United State of America |
| Wa..... | wayu Health center |

Chapter One: Introduction

1.1. Background

In the era of globalization, employee turnover is a persistent problem in the organizations. It is common in every type and size of organization and at every organizational level. Staff turnover is a serious issue especially in the field of human resources management because it has adverse consequence for effective organizational functioning. High turnover ratio in the organizations causes high cost of recruiting and training new employees, decrease of organizational performance, lack of organizational employee continuity and organizational stability (1, 2). Therefore, turnover is an undesirable event in the organizations, because “long-term productivity is affected not only by hiring the best qualified personnel, but keeping them in the organization for long periods of time” (3).

Although the definition of turnover varies according to different literatures, employee turnover is defined as the ratio of the number of workers that had to be replaced in a given time period to the average number of workers. It is generally viewed as the movement of staff out of an organization (4).

The reasons behind the turnover decision have been investigated for years. However, the literature review shows that the main factor that affects employees to quit their current jobs is the intention itself (1, 2, 5, 6 and 7). According to the Theory of Reasoned Action, an individual’s behavior is determined by his or her behavioral intention (8). The more an individual shows intention to perform a particular behavior, the more he or she is expected to act it (8). For this reason, we should emphasize on the employees’ intention to leave.

Intention to leave is defined as “conscious and deliberate will fullness to leave the organization” (9). It refers to employee who are considering and thinking to quite a job (10, 11). So intention to leave has been acknowledged as the best predictor of actual turnover. The measurement of intention to leave can determine the likelihood of the staff leaving the organization. This helps to determine how one can find opportunities to reduce the overall turnover (12). Intention to leave is a complex phenomenon that depends on various factors.

1.2. Statement of the problems

The global shortage of human resources for health limits access to effective health services for many people's specially, poor peoples and most vulnerable groups. It hinders progress towards health and health development goals. Yet, estimates suggested that there is a shortage of 4.2 million health workers worldwide (13). 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 (14). In Ethiopia, the national ratio of health workers per 1000 population is 0.84. This is far less than the standard set by WHO of 2.3 health workers per 1000 population. The ratio of health workers to 1000 population also shows variation across countries' regions, with the highest ratio in Harari (2.8) and the lowest in Somali (0.47)(24).

In developing countries human resource shortages are not only due to production of health professionals, but also because of employee turnover and non stability of workers 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 (15). 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 (16). It is very costly for an organization and the cost is due to termination, advertising, recruitment, selection, and hiring new employees (12). The time and energy devoted to find suitable new employees and the time required for new employees to reach maximum level of productivity may sometimes result in difficulties in achieving organizational objectives (17). In US it is estimated that the total cost of turnover per employee in the range of \$4,200 to \$5,200 and puts the comprehensive cost of replacing a lost employee at 25% of the country's economy annually (18).

However, the health policies of Ethiopia give emphasis for developing an attractive career structure, remuneration and incentives for all categories of workers within their respective systems of employment in order to retain the workers, turnover is still a problem in the country (19).

As a result, even regardless of salary equivalent top-up payments in some regions in Ethiopia, more than 80% of the public hospitals outside the capital were under-staffed with physicians implying that the push factors are not only correlated with remuneration alone (20).

Despite the rapid expansion of health training institutions and the production of health professionals, the gain made is offset by annual losses. In Ethiopia, 33.3% of the staffs were left rural hospitals, followed by 20% left regional hospital, health centers and central hospital due to different purposes between 1995 and 2000 only (11).

Also, from HSDP II(2002-2005) to the second year of HSDP III(2006) total number of all physicians were declined from 2,453 to 1,806 (by 26.4%), senior midwives during the same period were declined from 191 to 178 (by 13%), pharmacy technicians from 1,428 to 1,023 (by 28.4%) , environmental health professionals' from 1,312 to 1,109(by 15.5%), laboratory technicians and technologists from 2,837 to 1,816 (by 36%), but only the availability of senior and junior nurses, and health officers showed significant increment during the period(21).

Again during the period 2005 to 2007 total numbers of physicians (general practitioners and specialists) graduated were 935. Based on this figure, 3050 physicians would have been expected to be in service at the end of 2008/2009. However, the number in service was 2162, thus indicating a loss of 888 physicians (29%) from public health of Ethiopia (24).

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 Addis Ababa. Whereas large regions such as Oromia, Amhara and SNNPR account for 95% of the country's population, they have only 15%, 18% and 16.7% of physicians respectively (22). The shortage and imbalance (or mal distribution) 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. Intention to leave is negatively affect the quality of work. Employee who consider to quite his 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 (23). In the study area, since no study was conducted previously, the purpose of this study was to assess the level of turnover and intention to leave and also its associated factors. The result aims to create a strategy for increasing health worker stability and decreasing health workers' degree of turnover.

Chapter Two: Literature Review

A cross sectional study conducted in Malaysia to assess the turnover intention of public health workers showed that almost 22 % of the health workers had intention to leave the current health institution in which they were working. From these workers, the medical officers had the highest rate of turnover intention (40.6 %); followed by dentists (39.8 %); pharmacists (38.8 %); medical specialists (36.3 %) and tutors (33.9 %). A sizeable portion of physiotherapists also indicated their intention to leave their job at 22.1% of response. The turnover intention is lower among the nurses at 18.5 % in comparison to those mentioned above (24). According to the results of the study conducted in five Chinese provinces, 38.7 % of the community health service workers did plan to leave the organization in which they were employed at that time.

The study also revealed that turnover intention of workers associated with age of workers, pay packets and learning and training opportunities. According to the study, workers older than 55years are 0.518 times that of health service workers younger than 24years (OR 0.518, 95 %CI = 0.296–0.905, $p = 0.021$). The turnover intention probability of community health service workers who consider that pay packets may result in turnover intention is 1.351 times that of other community health service workers (OR = 1.351, 95 %CI = 1.114–1.639, $p = 0.002$). The turnover intention probability of the community health service workers who consider learning and promotion opportunities influence turnover intention is 1.549 times that of other community health service workers (OR = 1.549, 95 %CI = 1.189–2.019, $p = 0.00$ (11). Another cross sectional study conducted in xiangyang city of china showed more than one- third (36.8%) of village doctors consider to leave the current health facility (25).

Study done in Pakistan also showed that there is significant positive relationship between intention to leave and job stress with ($\beta=0.733$) and ($p=0.000$). According to the results, more than 73% workers with Job stress have intention to leave their current institutions. Organizational commitment, Person Organization Fit and Job satisfaction contributes more than 4.1%, 9.9% and 3.7% to intention to leave respectively according to this study (26).

In the meta analysis of thirteen studies on registered nurses in Taiwan, they listed ten factors related to experienced turnover: poor promotion opportunity, work stress due to high workload, lack of continuing education, dissatisfaction with salary, superior, inflexible scheduling, administrative policies, recognition, unstable scheduling, and dissatisfaction with fringe benefits (27). The comparative study done in three African countries revealed, in Tanzania 18.8% [95%

CI: 15.6_22.2] health workers planning to leave their current job, and in Malawi indicated that 26.5% [95% CI: 23.7_29.5] they were actively seeking employment elsewhere, also in South Africa 41.4% [95% CI: 37.3_45.1] do not want to stay in their current position of work. Concerning the associated factors in south Africa, Tanzania and Malawi the intention to leave decreased significantly with age, the odds of leaving in the over 50 age group was half that of those under 30 years which contradicts the result of study in five province of china and it was negatively correlated with job satisfaction (28).

The more job stress, the lower group cohesion and the lower work satisfaction, the result is higher the anticipated turnover. Again the higher the work satisfaction, the higher group cohesion and the outcome is lower anticipated turnover. The more stable the schedule, the less work-related stress, the lower the anticipated turnover, the higher group cohesion and the higher work satisfaction (29).

In a survey done in hospital health worker of Uganda indicated that the important correlates of intention to stay or job satisfaction include the importance of salary (but not the satisfaction with salary, which is uniformly low), a good match between the job and the worker, active involvement in the facility, a manageable workload, supportive supervision, flexibility to manage the demands of work and home, job security, and a job perceived as stimulating or fun. Even though some developed countries reports indicate about 20% turnover; among Uganda nurses, study indicates interest in leaving Uganda or the health profession (80% intended to stay in their jobs at least three years), and with 85% still in their first jobs specifically older workers in general are more satisfied than their younger. Again, they found the average overall health worker job satisfaction to be neutral about 3.2 on a scale of 1 to 5. The average, however, masks a bimodal finding health workers were either satisfied (48.7%) or dissatisfied (35.3%), with only 16% reporting that they were “neutral” (30).

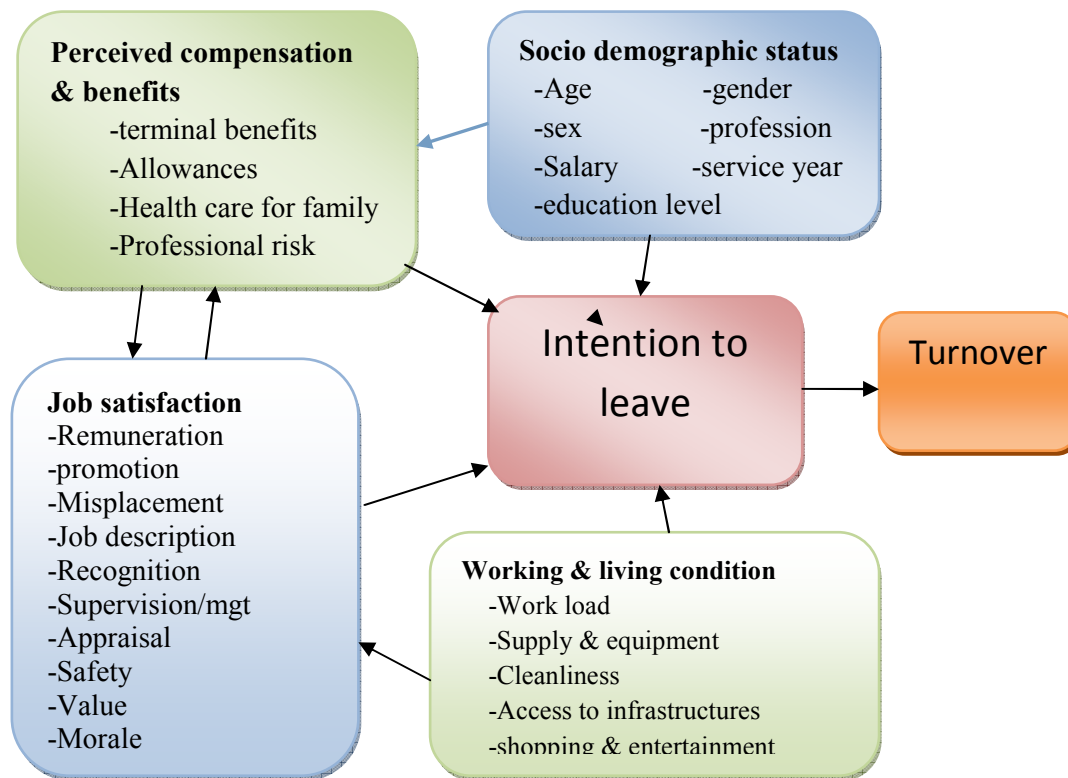
According to a survey done in Ethiopia, 74.6% of medical doctors, 62.5% of pharmacists, 50.6% of nurses, 50.0% of sanitarians, 36.4% of pharmacy technicians, 45.5% of laboratory technicians and 34.2% of health assistants respectively responded that they were not satisfied with their job. Reasons for dissatisfaction were low salary 60.3%, narrow opportunity for further education 24.8%, inadequate facility and supplies 20.1%. Among those who reported satisfaction from their job, the main reasons were satisfaction from helping others 43%, professional gratification 32% and the amount of monthly salary 18.1% (31). A qualitative study conducted in Bahirdar

town Amhara region of Ethiopia showed that, health professionals, managers and human resource managers stressed on push and pull factor of Health professionals' turnover from public health sectors. The most common push factors listed by FGD and in-depth interview participants were inadequate salary and remuneration, weak performance management of health sectors, poor working environments, lack of professional development and career, lack of transfer and promotion, lack of recognitions for good work, infrequent supervision and support, stress to heavy work overload (13). The study conducted in Jimma University specialized hospital, indicates with regard to five years plan of the respondents; 54.4% of the participants responded that they are planning to leave the hospital, making attrition rate to be 15.2% in the coming one year, 15.2% in the second year, 12.4% in the third year, 6.9% in the fourth year and 4.8% in the fifth year. The study also revealed regarding to specific profession, 60.0% of the physicians, 57.9% of nurses and 53.3% of laboratory professionals claimed to leave the institution. The reason given to leave the institution includes job dissatisfaction by 57.0%, family related issues 16.5% and personal related issues 27.8%. Majority of those who plan to leave the institution were aiming to work in NGO/private sectors (32).

A cross sectional study conducted in Hawassa and Yirgalem hospitals showed that the majority (83.7%) of the respondents have reported that they have intention to leave the hospital, of these 106(86.2%) and 120 (81.6%) health professionals were from Yirgalem and Hawassa referral hospital respectively(21). Concerning, reason for turnover intention are: about 82(30.4%) respondents from the study hospitals have intention of leaving their job because of low government salary scale and seeking better job for better pay, and about 47(17.4%) respondents from the study hospitals have reported that low government salary scale, and insufficient incentive mechanisms were another factors that insist them to leave their job and 40(14.8%) health professionals' have intention to leave their job because they feel unsupported, on top of seeking better job for better pay as a result of low government salary scale(21). Ethiopia, focused reducing turnover by producing a number of health professionals, developing appropriate continuing education for all categories of workers, strengthening administration and management of health systems is one of the areas given priority to reduce health professionals' turnover.

Conceptual Framework

Though there are many causes for staff turnover in an organization, all of those do not have negative impact on well being of an organization. For most part, voluntary turnover is treated as a managerial problem that requires attention, thus its theory has the premise that people leave if they are unhappy with their jobs and job alternatives are available (Hom & Kinicki, 2001). Factors such as competitive salary, friendly working environment, healthy interpersonal relationships and job security were frequently cited by employees as key motivational variables that influenced their retention in the organizations. It was theorized that new workers would show a stronger relationship between stressors and strain than more experienced workers and that perceptions of the work environment would differ for new workers. Work environment is also multi-dimensional, covering the control over the variety and order of work tasks, the quality or quantity of outputs, the pacing and scheduling of work, the physical environment which have direct relationship with turnover.



Source: Developed after reviewing different literatures. (3, 6, 8, 37, 38, 39)

Figure 1: Conceptual frame work for intention to leave public health facilities in Horo guduru wollega zone, 2015.

Significance of the Study

In Ethiopia, public health system is the major provider of health service for the community. Particularly, the poor segment of population uses public health institutions, since the private health facilities are inaccessible and unaffordable to them. In contrast, the health professionals' shortages at public health facilities are high due to turnover especially in rural and remote areas. Therefore, one of the pillars of improving quality of health care is addressing human resource problem. Thus, this study was conducted to assess factors that associated with intention to leave public health facilities among health worker in Horo guduru wollega, Oromia region, southwest Ethiopia. The result of this study helps zonal health department to consider during their planning creating a strategy for reducing turnover. The study also help the policy makers and managers to create a strategy for increasing health workers stability so as to help them to advance and meet the basic health service demands of the community and increase health workers' degree of work satisfaction in order to retain them. Also, the study result can be used as a base line for further studies.

Chapter Three: Objective

3.1. General Objective.

To assess turnover and intention to leave and associated factors among health workers in Horo Guduru Wollega zone public health facilities, Northwest Ethiopia, 2015.

3.2. Specific Objectives

1. To determine magnitude of health professionals' turnover.
2. To determine magnitude of health professionals' intention to leave public health facilities.
3. To identify factors associated with health professionals' intention to leave.

3.3. Hypothesis

Ho1: There is no significant relationship between socio demographic factors and intention to leave

Ho2: There is no significant relationship between job satisfaction score and intention to leave

Ho3: There is no significant relationship between working and living condition score and intention to leave

Ho4: There is no significant relationship between perceived compensation and benefits score and intention to leave

Ho5: There is no significant relationship between type of health facilities and intention to leave.

Ha1: There is inverse relation ship between age and intention to leave

Ha2: There is direct relationship between sevice years and intention to leave

Ha3: There is inverse relation ship between salary and intention to leave

Ha4: There is direct relationship between poor working environment and intention to leave

Ha5: Intention to leave higher among health workers who extremely consider housing allowances from their institutions.

Chapter Four: Method and Materials

4.1. Study Area and Period

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 that found in Oromia region. The zone is bordered in the south and in the east by the west Shewa zone, in the north by Amhara region and in the west by the east wollega zone. The administrative center of the zone is Shambu; located at the 316km to the northwest of Addis Ababa. The zone has a total population of 715,222 peoples; among these 364,763 are male and 350,459 are female. There were nine woredas and one town administration in the zone. There are around 1,124 health care professionals in the zone. Among these 954 were working in public health facilities; there were one government hospital and 49 health centers in the zone.

4.2. Study Design.

Institutional based Cross-sectional study design with both quantitative and qualitative study was used to assess the health professionals' intention to leave the public health institutions.

4.3. Populations

4.3.1. Source population

All health professionals holding diploma and above qualified and who were working in public hospital or health centers and those who have 6 months and above work experiences in the study institutions. For qualitative study and secondary data, hospital administrators and heads of health centers and five years record were used.

4.3.2. Study Population

All randomly selected health workers, working as full time in selected hospital and health center in Horo Guduru Wollega zone having a 6-month and greater work experience were participated in the study and five years record that was reviewed. For qualitative study, hospital administrators, and health center heads, were as key informants for the in-depth interviews.

4.4. Inclusion and Exclusion Criteria

4.4.1. Inclusion criteria:

All health workers having diploma and above qualification were involved in the study.

4.4.2. Exclusion criteria:

All health workers who had a work experience of less than 6 months and those who are on sick leave, annual leave, and maternity leave at the time of the study were excluded.

4.5. Sample Size determination and sampling technique

4.5.1. Sample Size

For quantitative study, sample size was determined using single population proportion formula by considering the proportion of health workers turnover intention (83.7%, from study conducted in Hawassa and Yirgalem hospital), 95% confidence level and 0.05 margin of error.

$$n = \frac{(Z_{\alpha/2})^2 p (1 - p)}{d^2}$$

Where:-n is the minimum possible sample size

$Z_{\alpha/2}$ is standard score value for 95 % confidence level for two sided normal distribution

P = is the estimated proportion of health workers turnover intention

d = is margin of sampling error.

$$n = \frac{(1.96)^2 0.837(1-0.837)}{0.05^2} = 210$$

Since the sample size is greater than 5% of the total population and population < 10,000, finite population correction formula was used.

Correction for finite population of less than 10,000 calculated by the formula

$$n_f = no / (1 + (no/N)) = \text{Final sample size} = 210 / (1 + (210/954)) = 172$$

By adding 5% non response rate the sample size for quantitative study was 181. Since we use multi stage sampling, the probability of all health professionals in the zone to be included in sample were not equal. So to overcome this problem we increase our sample size by taking design effect 2; therefore, final sample size was 362 individual health workers from the public health facilities.

4.5.2. Sampling technique

One town administration was selected purposively, since it was the only town administration in the zone and the only hospital in the zone was found in the town. Woredas were selected randomly by lottery method and all health center and hospital in the selected woreda and town administrators were included. Then proportional allocation of sample was done for each health center and hospital. To have individual study subjects from each health center and hospital,

systematic sampling method was employed during data collection with K value of 3 (N = 954 and n = 362 i.e. every 3rd workers from registration). The first health worker was selected by lottery method. For health workers who did not fulfill inclusion criteria the next health workers were selected. For secondary data, the five years record from 2010 to 2014 E.C was used for review purposively.

For qualitative data; in-depth interviews was conducted with two senior hospital administrators and 16 heads of health centers were identified using purposive sampling technique and then interviewed using interview guide.

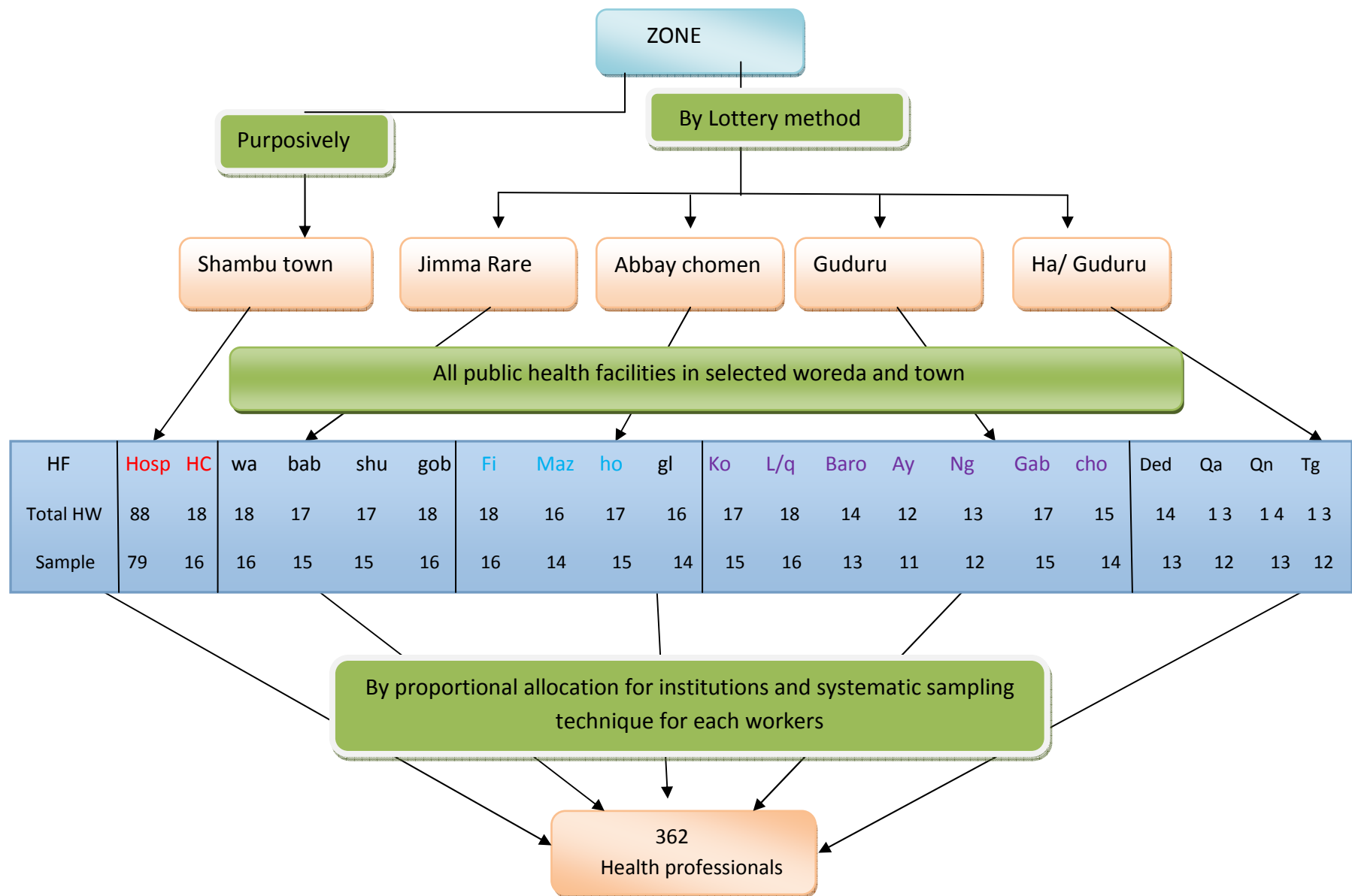


Figure 2: shows the schematic sampling procedures for health workers from Horo guduru wollega zone health facilities, 2015.

4.6. Variables

4.6.1. Dependent variables

- ◆ Intention to leave.
- ◆ Turnover

4.6.2. Independent variables

- ◆ Socio demographic characteristics
 - (age, sex, gender, income, educational level, professional category)
- ◆ Job satisfaction
 - (Benefit and salary, professional training, recognition at work, management/supervision, promotion, 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)
- ◆ Perceived compensation and benefits
 - (Terminal benefit, allowances (Duty, housing, & risk), health care for family, professional risk)

4.7. Data collection procedure

For quantitative part: Instruments were adopted from the jhpeigo national strengthening human resources for health project short form and related materials. The content of the questionnaires will be included socio respondents characteristics and lists of the following instrument factors for turnover intention.

Job satisfaction

Job satisfaction was assessed using 23 items on a five-point Likert scale ranging from very dissatisfied (1) to very satisfied (5). This scale was found to have high internal consistency (Crombach's $\alpha = 0.926$). When principal component analysis was computed, two factors with eigenvalue greater than one were identified. These items were satisfaction with management system and remunerations explained 64.361% and 47.184% of the overall variance respectively and were used during further analysis.

Working and living conditions

It was assessed using 15 items on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). This scale was found to have high internal consistency (Crombach's $\alpha = 0.746$). When principal component analysis was computed, only two factors with eigenvalue greater than one were identified. These items were working conditions and living conditions explained 60.322% and 38.529% of the overall variance respectively and were used during further analysis.

Perceived of compensation and benefits

It was assessed using nine items on a five-point Likert scale ranging from not important (1) to extremely important(5). This scale was found to have consistency (Crombach's $\alpha = 0.868$). When principal component analysis was computed, only one factors with eigenvalue greater than one was identified. This item was compensation and benefits explained 66.918% of the overall variance and were used during further analysis.

Intention to leave

Intention to leave was assessed using 6 items on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). This scale was found to have high internal consistency (Crombach's $\alpha = 0.830$). When principal component analysis was computed, one factors with eigenvalue greater than one were identified. These items was I think I would quit my job immediately which renamed into intention to leave, explained 67.118% of the overall variance and were used during further analysis as continuous dependent variable linearly.

Finally, the questionnaire prepared in English was translated to Afan Oromo (the local language) and retranslated back into English to ensure its consistency. Using the one in Afan Oromo questionnaire, 5% of sample size pretest was conducted in Gedo hospital and health center outside the study area. Qualitative data and secondary data were collected by guiding questions prepared according to the objectives of the study. Five diploma graduated health professionals those speak local language (Afan Oromo) and working outside the study health centers collected the data with two degree holder supervisors by conducting in-depth interview.

4.8. Operational Definition

Job satisfaction: Workers job satisfactions positive or pleasurable emotional state resulting from the appraisal of one's job or job experience. This instrument has 5-point Likert scale in which 5 denotes very satisfied and 1 denotes very dissatisfied. When the total score for job satisfaction sub scale is greater than computed mean (>3), we say they were satisfied on overall aspect of

their work. When equals to 3, we say moderate (not too bad), the rest were “dissatisfied”.

Intention to Leave a Job: The intent or predisposition to leave the organization where one is presently employed or employee’s plan of intention to quit the present job and look forward to find another job in the near future. It was measured by using five items with five-point Likert scale in which 1 denotes very disagree and 5 denotes very agree. Respondents considered have intention to leave the institution when the total score (agree/strongly agree) greater than percent mean for the subscale.

Turnover: Separations of health workers from public health by voluntary resignations, dismissals, non certifications, retirements and transfers to other agencies which do not include internal movements such as promotions, transfers out to other public health institutions. It was measured by the percentage of separations against the total number of employees.

Working and living conditions: It is operationalized as professional integration into the organization and their working environment. Consider condition level of this subscale as satisfied with working and living condition when respondents scored above their computed mean.

Promotion: It is the perceived interest (satisfaction) in one’s career development in the organizations. This aspect of job satisfaction was measured by using one item with 5-point Likert scale with one denoting very dissatisfied and 5 denoting very satisfied. Consider satisfaction level on promotion when respondent were scored above their mean.

Perceived compensation and benefits: It is the Perceived compensation and benefit opportunity in the organization that potentially individual can want and important to stay in the institution. This was measured by using nine items with 5-point Likert scale with 1 denoting not important and 5 denoting extremely important. Consider satisfaction level on perceived alternative employment opportunity when respondents scored above their computed mean.

Recognition at Work: It is the feeling of being valued by the organization administration. This is measured by using 5-point Likert scale with 1 denoting very dissatisfied and 5 denoting very satisfied. We consider that staffs were satisfied by the level of recognition in the organization when they scored above their individual mean.

Remuneration: It is the level of satisfaction with wage in the organization and it was measured by using two items each scored with five-point Likert scale with 1 denoting very dissatisfied and

5 denoting very satisfied. We consider that staff was satisfied by the level of benefit and salary in the organization when they scored above their computed mean of their individual mean.

4.9. Data analysis procedure

Quantitative data was entered into EpiData v3.1, exported to SPSS version 21 and cleaned to check for completeness and missing values. 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, which facilitate treatment of the variables as continuous during further analysis. Multiple linear regression analysis was done for identifying determinants of health workers intention to leave public health facilities. A significance level of 0.05 was used in all cases.

The assumptions in multiple linear regressions (linearity, normality and multicollinearity) were checked. During all factor analysis procedures, principal axis factoring with eigenvalue greater than or equal to one extraction and varimax rotation methods were employed. The factors extracted for each of the scales, which had Cronbach's alpha value greater than 0.7, were used in a subsequent analysis. Whenever the scales had more than one factor extracted the factors were renamed according to the items contained in the factor extracted. Prevalence of intention to leave was calculated by percent mean using the following formula:

$$\text{Index of \%mean} = \frac{\text{Actual value} - \text{Potential minimum}}{\text{Potential maximum} - \text{potential minimum}} \times 100$$

The tape-recorded qualitative data was transcribed and translated to English. The result will also be cleaned; edited and coded then theme was formed according to the objectives of the study and triangulated with quantitative data manually. The data from record review which assess the turnover of health workers was explored in descriptive form only.

4.10. Data quality management

The questionnaires were pretested outside the study area. After pretest, the questionnaire was reviewed for appropriateness of wording; clarity of both contents and whether instructions elicited is going with responses. Cronbach's alpha was calculated to test internal consistency (reliability) of items. If only Cronbach's alphas >0.7 were incorporated to the main research questionnaire. Data collectors were trained for one day to be familiar with data collection tool. Editing and sorting of the questionnaires were done to determine the completeness and

consistency of data every day during the data collection. The completed questionnaires were cross checked and made correction on daily basis.

4.11. Ethical consideration

An ethical approval was obtained from Ethics Review Committee of College of Health Science of Jimma University. Permission letters was obtained from department of Health economics management and policy of Jimma University. The letters of cooperation obtained from Oromia health bureau and also from the zonal health department and were presented to selected health institutions. Oral consent was taken from each participant before start of data collection. Confidentiality were assured by indicating they are not requested to write their name on the questionnaire and by assuring that their responses not in any way be linked to them. In addition, they were told they have the right not to participate and withdraw from the study at any time.

4.12. Dissemination plan

The findings were presented to the Jimma University scientific community in a defense and the result was submitted to the department of health economics, management and policy. The findings were communicated to the Horo Guduru Wollega zonal health department and Oromia regional health bureau to enable them to take and apply research recommendations during their planning process. Publications in peer-reviewed, national, or international journals also considered.

Chapter Five: Results

5.1. Respondents characteristics of respondents

A total of 362 health workers responded to questionnaire, yielding 100% response rate. From these, 284(78.5%) were from health centers while 78(21.5%) were from hospital. Two hundred twenty two (60.8%) respondents were male, and most of them (65.2%) were married while one hundred fourteen (31.5%) respondents were single. The mean age of the respondents was 27.89 ± 6.14 years. In ethnicity three hundred four (84%) were Oromo. By religion, two hundred twenty three (61.6%) respondents were protestant followed by 91(25.1%) were orthodox. Two third (66%) of respondents' birth place were rural. In their educational qualification more than half (57.5%) were diploma and one hundred forty-four (39.8%) were degree holder. Professionally, majority (59.1%) respondents were nurses or midwife. Hundred ninety three (53.3%) respondents' monthly salary ranges from 2000 to 4000ETB. More than half (58.6%) of health workers have service year of 1-5 year while 25.7% served 6-10 years (Table 1).

Table 1: Respondents characteristics of health professionals in Horo Guduru Wollega zone public health facilities, 2015.

| 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 |

| Respondents' characteristics | | Frequency | Percentage |
|-------------------------------|--------------------|-----------|------------|
| 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 |
| | Wakefata | 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 and above | 10 | 2.7 |
| Professional categories | Nurses /Midwife | 214 | 59.1 |
| | Health officers | 42 | 11.6 |
| | Laboratory | 41 | 11.3 |
| | Pharmacy/druggist | 37 | 10.2 |
| | Physicians | 6 | 1.7 |
| | Others | 22 | 6.1 |
| Service year in health sector | Less than one year | 43 | 11.9 |
| | 1-5 years | 212 | 58.6 |
| | 6-10 years | 93 | 25.7 |
| | 11-15 years | 10 | 2.8 |

| | | | |
|--|--------------------|-----|------|
| | 16-20 years | 2 | 0.6 |
| | >20 years | 2 | 0.6 |
| Service year in current health institution | Less than one year | 76 | 21 |
| | 1-5 years | 222 | 61.3 |
| | 6-10 years | 57 | 15.7 |
| | ≥11 | 7 | 2 |

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

5.2. Magnitude of health professionals' turnover from public health

Five years secondary data was collected from January 01, 2010 to December 30, 2014. The turnover rate of health professionals from public sector was 19% to all professionals category. The turnover rate with professional category was 9(75%) for medical doctors, 3(60%) for MPH, 20(69%) for environmental health, for pharmacy 43(25.3%), Health officer 64(46.7%), Laboratory 35(26.2%) and nurse 72(8.5%).

5.3. Turnover of health professionals by year

With regard to the overall turnover, higher turnover was in the years 2012 (30%) and 2013 (22%).but trend did follow progressive decreasing order in the study period (Figure 3).

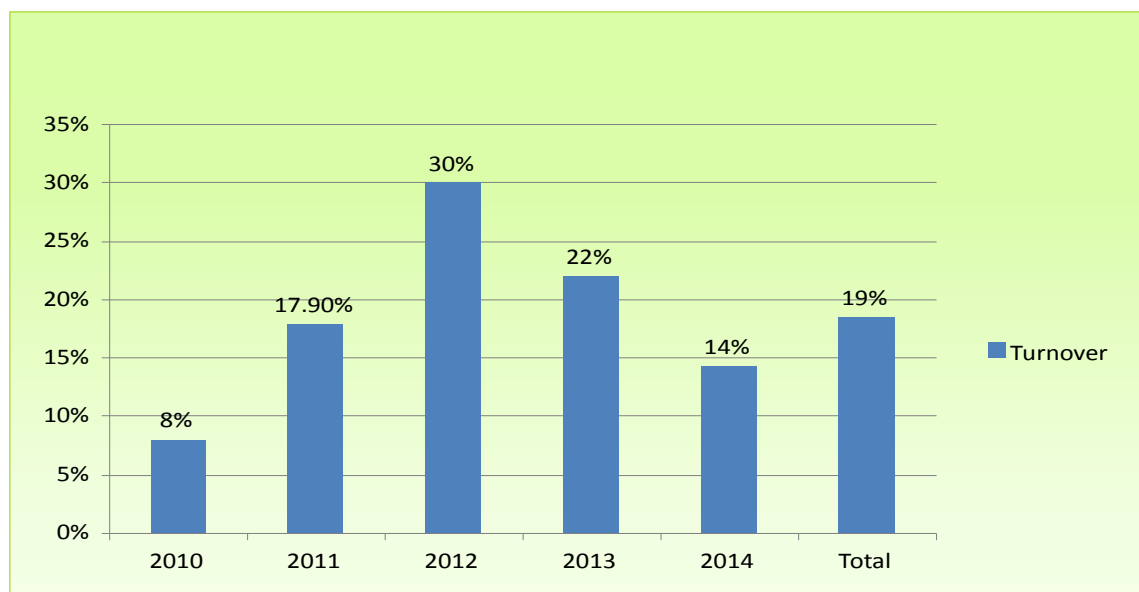


Figure 3: Health professional's turnover from public health facilities in Horo Guduru Wollega zone for last five years (2010-2014) in percent.

5.4. Ways of 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 (Figure 4).

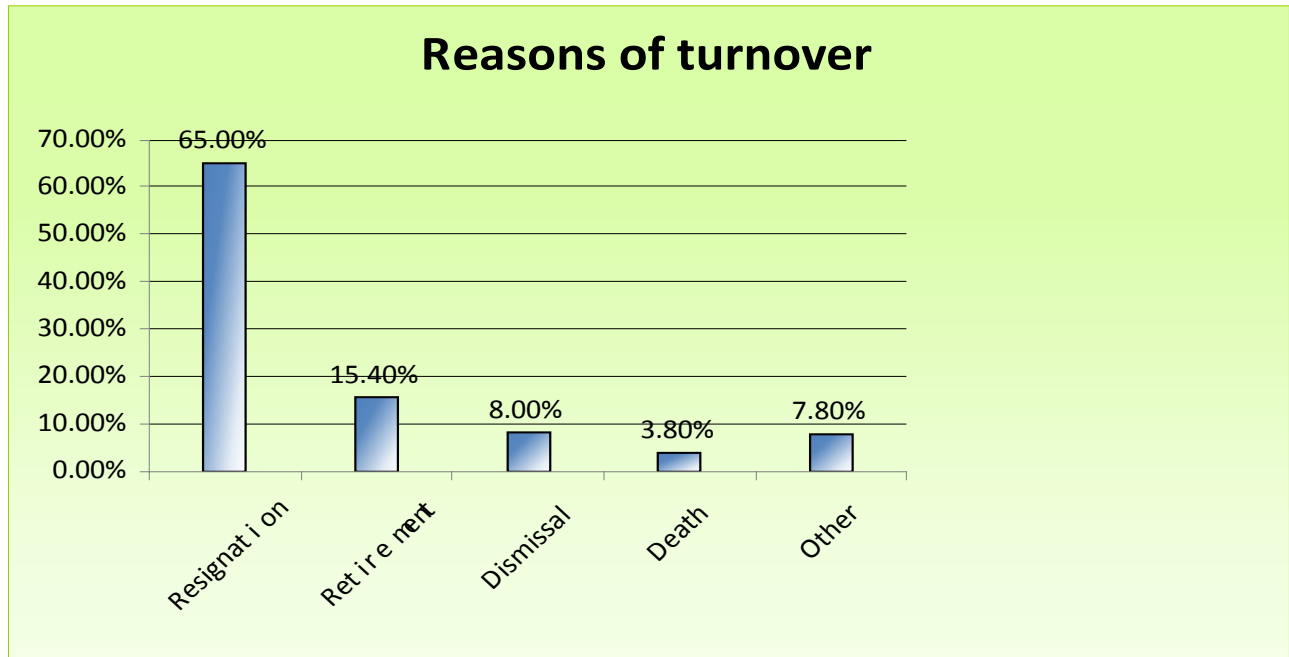


Figure 4: Reason of Health professional's turnover from public Health in Horo guduru wollega zone (2010-2014) in percent.

*Others include pension and transfer to other agencies.

5.5. Level of health professionals' intention to leave

From all health professionals in the zone, found that 151(41.7 %) and 84 (23.2%) of the respondents were strongly agree and agree to leave public health facilities respectively (Table 2).

Table 2: The levels of intention to leave public health facilities of health workers in Horo guduru wollega zone, 2015

| S.N | Level of intention to leave | Frequency | Percent (%) |
|-----|-----------------------------|-----------|-------------|
| 1 | strongly disagree | 9 | 2.5 |
| 2 | disagree | 39 | 10.8 |
| 3 | Neutral | 79 | 21.8 |
| 4 | Agree | 84 | 23.2 |
| 5 | strongly Agree | 151 | 41.7 |
| | Total | 362 | 100.0 |

Overall, 235(65%) of the health workers have agreed that they have intent to leave their current health institution, of these 193(81.7%) from health center and 42 (18.3%) health professionals were from hospital.

With regard to time to leave current health facilities; 114(48.5%) of the participants responded that they are planning to leave within 2-3years, while 100 (42.6%) have planned to leave within one year and the rest 12(5.1%) and 9(3.8%) were planned to leave within 4-5 years and after 5 years respectively. Concerning place of work after they leave current health institution, 61(26%) have prefer to working in other governmental organization, 82(35%) have planned to run their own business and the rest 80(34%) and 12(5%) want to work in NGO and in other non health institutions respectively. Majority of health professionals (86.9%) prefer working by their profession.

5.6. Level of intention to leave by professional categories

Majority of health professionals agree to leave public health facilities 50% of physicians, 72% of health officers/public health and 83% from others plan to leave. Over all 65% of health workers pan to leave while only 13% have no plan to leave (Figure 5)

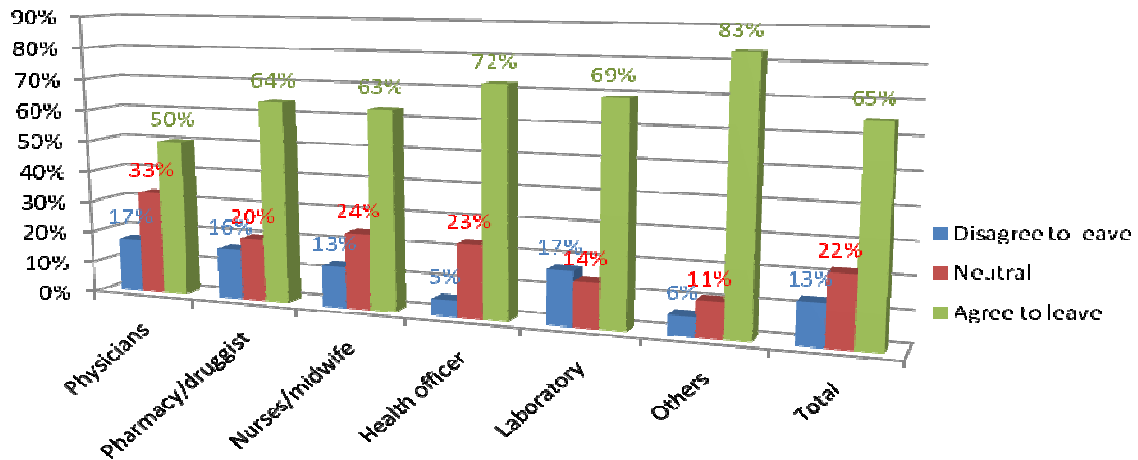


Figure 5: Frequency of intention to leave by profession among Horo Guduru Wollega zone public health facilities, 2015.

*Others include: Environmental health professionals, anesthesia and x-ray technicians.

5.7. Level of job satisfaction

The descriptive statistical results of the job satisfaction subscales of the investigated health workers indicated that; health professionals were less satisfied with opportunity for promotion ($2.13 \pm .91$), recognition for doing good work ($2.14 \pm .902$), work plan developed with supervisor ($2.24 \pm .89$), family and friend encouragement to seek care in their health facility ($2.232 \pm .927$). They were highly dissatisfied with salary package ($1.51 \pm .767$) and fairness of salary when compared to other staffs ($1.63 \pm .866$) (Table 3)

Table 3: Frequency and percentage distribution of responses on job satisfaction subscale, Horo guduru wollega zone public health facilities, 2015.

| S.N | Subscales | Dissatisfied Freq (%) | Not too bad Freq (%) | Satisfied Freq (%) | Mean \pm SD |
|-----|--|--------------------------|-------------------------|-----------------------|------------------|
| 1 | Salary package | 235(65) | 66(18.2) | 61(16.8) | $1.51 \pm .767$ |
| 2 | Fairness of salary when compared to other staffs | 228(63) | 41(11.3) | 93(25.7) | $1.63 \pm .866$ |
| 3 | Opportunity for promotion | 129(35.6) | 56(15.5) | 177(48.9) | $2.13 \pm .91$ |
| 4 | Recognition for doing good work | 125(34.5) | 61(17) | 176(48.5) | $2.14 \pm .902$ |
| 5 | Work plan developed with supervisor | 112(31) | 49(13.5) | 201(55.5) | $2.24 \pm .89$ |
| 6 | Annual performance appraisal based on my work plan | 135(37.3) | 40(11) | 187(51.7) | $2.144 \pm .933$ |
| 7 | Organization value my work | 126(35) | 62(17) | 174(48) | $2.132 \pm .902$ |
| 8 | Family and friend encouragement | 123(34) | 32(9) | 207(57) | $2.232 \pm .927$ |
| 9 | Part of local community | 85(23.5) | 47(13) | 230(63.5) | $2.4 \pm .843$ |
| 10 | Community value my work | 71(20) | 59(16) | 232(64) | $2.44 \pm .80$ |
| 11 | Team sprit | 128(35.4) | 59(16.3) | 175(48.3) | $2.129 \pm .91$ |

5.8. Working and living conditions of respondents

For one hundred seventy eight (49%) of health professionals work load is not reasonable while 174(48.1%) health workers agree with the supply needed to do their job also 142(39.2%) agree to access to drug and medication. 205(57%) agree with the cleanliness of work space. 194(53.5%) disagree with the availability of safe and clean water at home, and 257(71%) do not worried about losing their job (Table 4).

Table 4: Frequency and percentage distribution of responses on working and living conditions subscale, Horo guduru wollega zone public health facilities, 2015.

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

5.9. Importance of compensation and benefits for health workers

One hundred eighty five (51%) health workers extremely agree with the importance of housing allowance, also for majority of health workers, assistance with transportation, risk allowance, duty allowance, health care for family and professional allowances are extremely important in deciding to stay or leave public health facilities respectively (Table 5).

Table 5: Frequency distribution of responses on importance of compensation and benefit subscale, among health workers in Horo guduru wollega zone public health facilities, 2015.

| S.N | Variables | Extremely important | Very important | Important | Somewhat Important | Not Important |
|-----|------------------------------------|---------------------|----------------|-----------|--------------------|---------------|
| 1 | Housing allowance | 185(51%) | 54(15%) | 31(8.6) | 43(11.9%) | 49(13.5%) |
| 2 | Assistance with transportation | 176(48.6%) | 57(15.7%) | 41(11.3%) | 42(11.6%) | 46(12.7%) |
| 3 | Risk allowance | 243(67%) | 30(8.3%) | 37(10.2%) | 25(7%) | 27(7.5%) |
| 4 | Duty allowance | 257(71%) | 53(14.6%) | 25(6.9%) | 17(4.7%) | 10(2.8%) |
| 5 | Health care for family | 234(64.6%) | 51(14.1%) | 26(7.2%) | 12(3.3%) | 39(10.8%) |
| 6 | Professional risk/hazard allowance | 254(70.2%) | 36(10%) | 22(6%) | 18(5%) | 32(8.8%) |

5.10. Cronbach's alpha and mean of factors extracted from factor analysis.

Cronbach's alpha for remuneration and infrastructure were less than 0.7 and mean of compensation and benefit was above computed mean and mean of management system and work environment were less than computed mean three that shows dissatisfaction (Table 6)

Table 6: Description of factor score of health workers in Horo Guduru Wollega zone public health facilities, 2015.

| S.N | Measure of dimensions(factor scores) | No of items | Cronbach's alpha | Mean | Variance in % |
|-----|--------------------------------------|-------------|------------------|-------|---------------|
| 1 | Compensation and benefits | 6 | .895 | 4.112 | 66.918 |
| 2 | Management system | 9 | .906 | 2.22 | 64.361 |
| 3 | Remuneration | 2 | .554* | 1.57 | 47.184 |
| 4 | Infrastructure | 2 | .139* | 3.51 | 61.021 |
| 5 | Work environment | 6 | .795 | 1.467 | 60.322 |
| 6 | Long hour work | 2 | .836 | 3.736 | 63.122 |
| 7 | Living condition | 3 | .757 | 3.48 | 38.529 |
| 8 | Intention to leave | 5 | .874 | 3.627 | 67.118 |

*Not used in further analysis since their Cronbach's alpha less than 0.7.

5.11. Socio-demographic predictor of intention to leave

Socio-demographic variables were found to be explain only 6.6% of the variability in the health workers intention to leave factor score (R square = 0.066). From the model that was consisting the socio-demographic variables only salary, service in health sector, obligation/compulsory services and professional categories were statistically significant. According to the model, salary of the respondents in the public health facilities was inversely associated with intention to leave ($\beta=-0.194$, $P=0.015$), as salary increased a unit intention to leave decreased by .194. Health workers who have current obligation (compulsory service scheme) to work in public health system had .261 unit lower intention to leave compared to those who had no compulsory services ($\beta=-0.261$, $P=0.017$). Again health workers who have service of greater or equals to 11 years had .984 unit lower in intention to leave compared to those who had 1-5 service year in health sector ($\beta=-0.984$, $P=0.003$). Health professionals who are physicians had .848 unit more intention to leave than health workers who are nurse or midwife ($\beta=-0.848$, $P=0.040$) (Table 7).

Table 7: Socio-demographic predictors of intention to leave public health facilities among health workers in Horo Guduru Wollega zone, 2015.

| | No (%) | Un standardized | Standardized | Sig. | 95% Confidence Interval for B |
|----------------------------|-----------|-------------------|----------------------|------|-------------------------------------|
| | | Coefficients B | Coefficients Beta | | |
| (Constant) | | -.297 | | .069 | (-.617, .023) |
| Types of health facilities | | | | | |
| Health center* | 284(78.5) | | | | |
| Hospital | 78(21.5) | .085 | .035 | .547 | (-.192, .363) |
| Sex | | | | | |
| Male * | 220(60.8) | | | | |
| Female | 142(39.2) | .064 | .031 | .571 | (-.158, .285) |
| Marital status | | | | | |
| Single * | 114(31.5) | | | | |
| Ever married | 248(68.5) | .037 | .017 | .763 | (-.205, .279) |
| Birth place | | | | | |
| Rural* | 339(66) | | | | |

| | | | | | |
|---------------------------------------|-----------|-------|-------|------|-----------------|
| Urban | 123(34) | -.071 | -.034 | .534 | (-.296, .153) |
| Educational qualification | | | | | |
| Diploma* | 208(57.5) | | | | |
| Degree and above | 154(42.5) | .027 | .013 | .861 | (-.272, .326) |
| Professional category | | | | | |
| Nurse or midwife | 214(59.1) | | | | |
| Physician | 6(1.7) | .848 | .108 | .040 | (.041, 1.655) |
| Pharmacy | 37(10.2) | .059 | .020 | .708 | (-.250, .368) |
| Health officers | 42(11.6) | .197 | .061 | .320 | (-.192, .586) |
| Laboratory | 41(11.3) | .116 | .034 | .528 | (-.246, .479) |
| Other profession | 22(6.1) | .448 | .097 | .069 | (-.035, .930) |
| Service in health sector | | | | | |
| 1-5 years | 212(58.6) | | | | |
| 6month to <1 year | 43(11.9) | -.356 | -.115 | .133 | (-.819, .108) |
| 6-10 years | 93(25.7) | -.150 | -.066 | .422 | (-.517, .217) |
| ≥ 11 years | 14(3.8) | -.984 | -.161 | .003 | (-1.638, -.329) |
| Service in current health institution | | | | | |
| 1-5 years* | 222(61.3) | | | | |
| 6month to <1 years | 76(21) | .251 | .102 | .054 | (-.005, .507) |
| 6-10 years | 57(15.7) | .075 | .028 | .705 | (-.317, .468) |
| ≥ 11 years | 7(2) | .448 | .052 | .488 | (-.820, 1.716) |
| Compulsory service | | | | | |
| No* | 221(61) | | | | |
| Yes | 141(39) | -.261 | -.128 | .017 | (-.476, -.047) |
| Up graded education | | | | | |
| No* | 300(83) | | | | |
| Yes | 62(17) | .109 | .041 | .504 | (-.212, .430) |
| Salary | | .194 | .131 | .015 | (.038, .350) |

R=0.257, R square = 0.066, AR square=0.050, VIF <10, Tolerance > 0.1

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

5.12. Predictors of intention to leave of health professionals

All predictors of intention to leave were entered into a linear regression model and the final predictors of the intention to leave score were identified. The model explain about 22.8% of the variance in the intention to leave (R square = 0.228, P = 0.000). 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 were statistically significant that affect 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: 1.638, .193)). Health workers who have greater than or equals to 11 years service year in health sector had .474 lower intention to leave than those health workers who had 1- 5 service years in health sector ($\beta=-0.474$, (95%CI: -.867, -.080)). Satisfaction with management system of health facility was inversely related to intention to leave ($\beta=-0.333$), that is as satisfaction with the management system of health professionals increase a unit intention to leave lowered/decreased by .333 (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 8).

Table 8: Factors that predicting intention to leave public health facilities among health workers in Horo guduru wollega zone, 2015.

| | No (%) | Un standardized | Standardized | Sig. | 95% CI for B |
|----------------------------|-----------|-----------------|--------------|------|---------------|
| | | Coefficients | Coefficients | | |
| | | B | Beta | | |
| (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/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 | 22(6.1) | .368 | .080 | .122 | (-.099, .835) |
| Service year in health sector | | | | | |
| 1-5 years | 212(58.6) | | | | |
| 6month - <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 environmental | | .138 | .138 | .004 | (.045, .230) |
| Long hour work | | .096 | .096 | .064 | (-.002, .191) |

R=0.478, R square = 0.228, AR square=0.211, VIF <10, Tolerance > 0.1

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

Chapter Six: Discussion

This study clearly demonstrated that, magnitude of health workers turnover was 19%. The major reason for turnover was resignation in this study. The finding is lower than the previous study done in Bahirdar city (13). The main differences might be due to poor registration and documentation at health facility level and in the zone transfer out to other place. The prevalence of health workers intention to leave public health facilities of the zone was 65%. This finding is slight lower than study done in Hawassa and Yirgalem hospitals in which 83.7% of health workers intend to leave (21). But higher than other study done in Sidama zone which was 50% (33). This study showed that health professionals' having intention to leave their health facilities were much more higher than the study findings conducted in South Africa, Malawi and Tanzania which was 41.4%, 26.5% and 18.8% respectively.

The difference may be attributed to difference in socio demographic characteristics and payment packages among 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: 1.638, .193]). This finding is quite comparable with other studies which were conducted in different parts of the country and elsewhere in developing countries (10, 13, 30 and 32). For example study done in Bahirdar revealed that medical doctors more intend to leave public health facility (AOR: 60.71 (13.64, 270.21) (13).

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)(13). 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: *As most informant of in-depth interview 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 ($\beta=-0.044$, $P=0.037$) that is as salary of health professionals increased a unit intention to leave decreased by .044 (95%CI: -0.273, -0.184). This finding is quite comparable with other studies which were conducted in the country (13, 21, and 32). 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 (21). Interviewer answered supporting the idea for the quantitative data. *Many of health center heads were said that: “....diploma holders are not considered well in salary adjustment ... but other profession fevered during that the gap between degree holders and diploma holder are high on other hand no curriculum for 10+3 they also worry for further education this cause dissatisfaction with their job which cause turnover....”*

Attempts made to identify determinants of intention to leave, revealed that satisfaction with management system was negatively associated with intention to leave ($\beta= -.333$, $P=0.000$), Health workers who satisfied with management system of health facilities were lower intention to leave public health facilities ($\beta=-0.333$, [95%CI: -.428, -.238]). This finding is in line with other studies which was conducted in Sidama zone satisfaction which was negatively correlated ($n = 242$), $r (242) = -0.23$, ($P < 0.05$), with intention to leave the organization (33). Perceived compensation and benefit such as allowances are directly affect intention to leave public health facilities. As expectation for compensation and benefit increased a unit intention to leave of health workers increased by .134($\beta=0.134$, [95%CI: .040, .229]). Also, 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 (30).

In addition, the result was supported by in-depth interview: all respondents said that “*...health workers leave and plan to leave public health as a result of low payment and allowances like housing, risk and professional for all health workers this make them to see outside public health.....”*

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 (33). This is also the case in most developing countries where public health facilities in general are characterized by poor infrastructure (33, 35 and 36). Also, this result is supported from in-depth interview; almost all who participated in the interview were said: “. . . *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.....*”

Chapter Seven: Conclusion and Recommendation

7.1. Conclusion

Our study indicated that health professionals' turnover was still a problem in public health facilities. Majority of health professional working in zone, want to leave their current public health facilities which can greatly affect the quality of health services. Intention to leave was highly determined by professional category, work experience they have in health sector and by salary of health professionals. Also, satisfaction with management system of health facilities, poor working environment and compensation and benefit packages they get from their institution were strong predictors of intention to leave public health facilities among health workers in the zone.

7.2. Recommendation

It is recommended that, respective health facility managers should:-

- Plan actions aimed at favoring organizational socialization in order to foster new personnel integration, since intention to leave was higher among health workers who have lower service year.

Zonal health department should work to retain health workers at health facilities by:-

- Improving working environment by increasing, the utilities like water supply and electricity accessibility at home and at work places and should solve transportation problem for health professionals.
- Should solve the management problems of health facility by ensuring equal opportunity for promotion for all workers, give recognition for good work they have done, making annual performance appraisal based on their work plan, improving supportive supervision for work since most of workers did not satisfied with it.

Regional health bureau should facilitate:-

- Compensation and benefits like housing allowance assist with transportation, health care for their family and risk, duty, hazard/professional allowances for health workers especially for those who are working in rural areas.

Ministry of health of Ethiopia should advocate improving salary adjustment for health professionals in order to retain health professionals at public health facilities.

7.3. Limitations of the study

This research is based on cross-sectional study which may be biased because they only capture the views of health workers that have remained in service and doesn't show cause-effect relationship. Also, the measurements were conducted by self-administrated method and respondents' cognition can be affected by emotions at that point in time.

On the other hand, during data collection, document/record/ review was done, which was difficult to get full documents of health workers because of low documentation in almost all health facilities. Due to this the magnitude of health professionals' turnover rate in the zone might be underestimated. In addition, proportion of intention to leave taken for sample size calculation was from study done in hospitals, and was used for health centers.

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Annexes

1. Questionnaires in English Language

Part I: Introduction

Questionnaire for assessing Health Workers' intention to leave, and associated factors among health workers in Horo guduru wollega zone public health facilities, Northwest Ethiopia, 2015.

Instructions

Jimma University College health science, department of Health economics management and policy is conducting this study on health professionals' intention to leave and determinant factors in Horo guduru wollega zone health facilities.

This survey is aimed at better understanding of the job satisfaction and work conditions that contribute to health workforce turnover. By gathering much information from many employees, we hope to learn what factors are most important for health workers turnover.

This questionnaire contains a series of questions that take about 15-20 minutes to complete. Please answer every question in the booklet. Instructions for how to respond to the different part of the questionnaire are provided at the top of each section. Please note that there is no right or wrong answers, just what you think and how you perceive your work situation.

All the information that you provide will be kept confidential; your participation is voluntarily and you are not obliged to respond to any questions you don't want to respond. If you are not still comfortable with the study, please feel free to not participate.

Please after you have completed answering all the questions check once that all questions are answered and finally, put the questionnaire in envelop, seal it and give it to the data collection facilitator.

Thank you so much for your time!

101. Date of data collection _____

102. Name of woreda/town _____

Part II: Socio-demographic characteristics of health workers

Please circle your best choices or fill in the blank spaces

| Q.No | Questions | Possible choice/ Answers |
|------|---|--|
| 201 | Age | 1. <25 2. 25- 35 3. 35 - 45 4. 45 - 55 5. ≥55 |
| 202 | Sex | 1. Male 2. Female |
| 203 | Ethnicity | 1. Oromo 2. Gurage 3. Tigre 4. Amhara 5. Other (specify) _____ |
| 204 | Religion | 1. Orthodox 2. Catholic 3. Muslim 4. Protestant 5. Other (specify) _____ |
| 205 | Marital status | 1. Single 2. Married 3. Divorced 4. Widowed 5. Other (specify) _____ |
| 206 | What is your birth place? (Determine whether it is urban or rural and circle answer) | 1= Urban 2= Rural |
| 207 | Educational qualification, | 1. Diploma 2. Degree 3. Masters & above 4. Other (specify) _____ |
| 208 | Professional category. | 1. Physician 5. Health officer |

| | | | |
|-----|--|---|---|
| | | 2. Pharmacy & druggists 3. Nurses or mid wife 4. Environmental health | 6. Laboratory 7. Anesthesia 8. Others(specify)_____ |
| 209 | Service year in health sector | 1. Below 1year 2. 1–5 years 3. 6–10 years | 4. 11–15 years 5. 16–20 years 6. 20 years and above |
| 210 | Service in current health institution | 1. Less than 1 year 2. 1–5 years 3. 6–10 years | 4. 11–15 years 5. 16–20 years 6. 20 years and above |
| 211 | Average monthly income | 1. <2000 2. 2001-3000 | 3. 3001 -4000 4. >4001 |
| 212 | Type of facility | 1. Health center | 2. Hospital |
| 213 | Family conditions | 1. Living with family 2. Living separated from family | 3. No family 4. other _____ |
| 214 | What is the status of your current residential house? (Circle one) | 1= Own 2= Rent from public 3= Rent from private | 4. Provide by health facility 5. Live with parents |
| 215 | Have you specialized or upgraded from your first professional qualification? | 1= Yes | 2= No |
| 216 | Do you have a current obligation (compulsory service scheme) to work in the public | 1. Yes 2. No | |

| | |
|---|--|
| health system? | |
| Note: Refer to the remaining years and /or months | |

Part III: Job Satisfaction

Now I want to ask how you feel about your current job. Please tell me whether you agree or disagree with each statement, using a 5 point scale where:

5=strongly agree 4=agree 3=neutral 2=disagree 1=strongly disagree

| # | To what extent do you agree or disagree with the following statements? | 5= Strongly agree | 4= Agree | 3= Neutral | 2= Disagree | 1= Strongly disagree |
|-----|---|-------------------------|-------------|---------------|----------------|----------------------------|
| 301 | Considering everything, I am satisfied with my job. | 5 | 4 | 3 | 2 | 1 |
| 302 | My salary package is fair | 5 | 4 | 3 | 2 | 1 |
| 303 | My salary is fair compared to other staff with the same level of responsibility. | 5 | 4 | 3 | 2 | 1 |
| 304 | I feel there are sufficient opportunities for promotion with my employer | 5 | 4 | 3 | 2 | 1 |
| 305 | My benefits (such as transportation, duty allowance, housing, etc.) are fair compared with other staff at my level | 5 | 4 | 3 | 2 | 1 |
| 306 | The job is a good match for my skills and experience | 5 | 4 | 3 | 2 | 1 |
| 307 | My job description is clear and up to date | 5 | 4 | 3 | 2 | 1 |
| 308 | I receive recognition for doing good work. | 5 | 4 | 3 | 2 | 1 |
| 309 | My supervisor applies personnel policies and practices fairly to me | 5 | 4 | 3 | 2 | 1 |
| 310 | I have a current work plan developed with my | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | supervisor | | | | | |
| 311 | My annual performance appraisal is based on my work plan | 5 | 4 | 3 | 2 | 1 |
| 312 | I feel that the organization values my work | 5 | 4 | 3 | 2 | 1 |
| 313 | My supervisor is available when I need support | 5 | 4 | 3 | 2 | 1 |
| 314 | I would encourage my friends and family to seek care here. | 5 | 4 | 3 | 2 | 1 |
| 315 | I have been given the training that I need to succeed in my position | 5 | 4 | 3 | 2 | 1 |
| 316 | I have access to coaching and mentoring when needed | 5 | 4 | 3 | 2 | 1 |
| 317 | The facility takes specific measures to protect me against HIV/AIDS and other occupational hazards | 5 | 4 | 3 | 2 | 1 |
| 318 | I consider myself a part of the local community that I serve as a health worker | 5 | 4 | 3 | 2 | 1 |
| 319 | I feel that the community values my work | 5 | 4 | 3 | 2 | 1 |
| 320 | The head of this health facility is competent and committed | 5 | 4 | 3 | 2 | 1 |
| 321 | I have a good relationship with co-workers | 5 | 4 | 3 | 2 | 1 |
| 322 | Overall, the morale level in my team or work group is good | 5 | 4 | 3 | 2 | 1 |
| 323 | I intend to continue working here for at least 2 years | 5 | 4 | 3 | 2 | 1 |

Section IV: Working and Living Conditions

Now I want to ask you about the working conditions at your current facility. Please tell me whether you agree or disagree with each statement, using a 5-point scale where: 5=strongly agree 4= agree 3= neutral 2= disagree) 1= strongly disagree

| # | To what extent do you agree or disagree with the following statements? | 5= Strongly agree | 4= Agree | 3= Neutral | 2= Disagree | 1= Strongly disagree | 9=Not applicab le |
|-----|--|-------------------------|-------------|---------------|----------------|----------------------------|-------------------------|
| 401 | My work load is reasonable | 5 | 4 | 3 | 2 | 1 | 9 |
| 402 | I have the supplies I need to do my job well and safely) (Such as gloves, needles, bandages, sutures, disinfectants | 5 | 4 | 3 | 2 | 1 | 9 |
| 403 | I have the working equipment I need to do my job well and efficiently) (Such as ultra sound, x-ray, blood pressure cuffs | 5 | 4 | 3 | 2 | 1 | 9 |
| 404 | This facility has good access to drugs and medications | 5 | 4 | 3 | 2 | 1 | 9 |
| 405 | My work space is clean | 5 | 4 | 3 | 2 | 1 | 9 |
| 406 | I can take time to eat lunch almost everyday | 5 | 4 | 3 | 2 | 1 | 9 |
| 407 | At home, I have access to safe, clean water | 5 | 4 | 3 | 2 | 1 | 9 |
| 408 | At work, I have access to safe, clean water | 5 | 4 | 3 | 2 | 1 | 9 |
| 409 | At home, I have good access to electricity | 5 | 4 | 3 | 2 | 1 | 9 |
| 410 | At work, I have good access to electricity | 5 | 4 | 3 | 2 | 1 | 9 |
| 411 | At work, I have good internet connectivity | 5 | 4 | 3 | 2 | 1 | 9 |
| 412 | I have access to good schooling for my children | 5 | 4 | 3 | 2 | 1 | 9 |

| | | | | | | | |
|-----|--|---|---|---|---|---|---|
| 413 | I have safe and efficient transportation to work. | 5 | 4 | 3 | 2 | 1 | 9 |
| 414 | I am not worried about losing my job | 5 | 4 | 3 | 2 | 1 | 9 |
| 415 | The community where I live has good shopping and entertainment | 5 | 4 | 3 | 2 | 1 | 9 |

Section V: Importance of Compensation and Benefits

Next I want to ask your personal opinion about various compensation and benefits that employers may offer. How important is each of the following factors to you personally in deciding to stay in this job? Use a 5-point scale to answer, where:

5=extremely important, 4=very important, 3=important, 2=somewhat important, 1=not important

| # | How important are the following compensation and benefits factors to you personally in deciding to stay in this job? | 5= Extremely important | 4= very important | 3= Important | 2= somewhat important | 1= Not important |
|-----|--|------------------------------|-------------------------|-----------------|-----------------------------|------------------------|
| 501 | Salary | 5 | 4 | 3 | 2 | 1 |
| 502 | Terminal benefits) (such as retirement and pension | 5 | 4 | 3 | 2 | 1 |
| 503 | Receiving a housing allowance or free housing | 5 | 4 | 3 | 2 | 1 |
| 504 | Assistance with transportation | 5 | 4 | 3 | 2 | 1 |
| 505 | Risk allowance | 5 | 4 | 3 | 2 | 1 |
| 506 | Duty allowance | 5 | 4 | 3 | 2 | 1 |
| 507 | Health care for family | 5 | 4 | 3 | 2 | 1 |
| 508 | Professional risk/hazard allowance | 5 | 4 | 3 | 2 | 1 |
| 509 | Food allowance Note: Food allowance refers to catering service for staff on duty, maternity and OR, etc | 5 | 4 | 3 | 2 | 1 |

Section VI: Factors that Affect the Decision to Leave a Job

Now I want you to think about what factors might affect our decision to remain in your current job or to leave it. If you were to consider leaving your current job position, how important would each of the following factors be in that decision? Use a 5-point scale to answer, where:

5=extremely important 4=very important 3=important 2=somewhat important 1=not important

| # | If you were to consider leaving your current job position, how important would the following factors be in that decision? | 5= extremely important | 4=very important | 3= important | 2= somewhat important | 1= not important | 9=Not applicable |
|-----|---|------------------------|------------------|--------------|-----------------------|------------------|------------------|
| 601 | Low pay | 5 | 4 | 3 | 2 | 1 | 9 |
| 602 | Heavy workload | 5 | 4 | 3 | 2 | 1 | 9 |
| 603 | Long hours of work | 5 | 4 | 3 | 2 | 1 | 9 |
| 604 | Unfair treatment by a supervisor | 5 | 4 | 3 | 2 | 1 | 9 |
| 605 | Poor access to supplies and equipment at work | 5 | 4 | 3 | 2 | 1 | 9 |
| 606 | Limited opportunities for in-service training | 5 | 4 | 3 | 2 | 1 | 9 |
| 607 | Limited opportunities for promotion | 5 | 4 | 3 | 2 | 1 | 9 |
| 608 | Lack of recognition for good work done | 5 | 4 | 3 | 2 | 1 | 9 |
| 609 | Social conflicts in the workplace | 5 | 4 | 3 | 2 | 1 | 9 |
| 610 | Poor supervision and feedback | 5 | 4 | 3 | 2 | 1 | 9 |
| 611 | Concerns about safety at work | 5 | 4 | 3 | 2 | 1 | 9 |
| 612 | Transportation problems | 5 | 4 | 3 | 2 | 1 | 9 |
| 613 | Poor/lack of utilities(water, electricity) at home | 5 | 4 | 3 | 2 | 1 | 9 |

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| 614 | Poor/lack of utilities (water, electricity, Internet) at work | 5 | 4 | 3 | 2 | 1 | 9 |
| 615 | Lack of housing facilities | 5 | 4 | 3 | 2 | 1 | 9 |
| 616 | Access to telephones to stay in touch with family and friends | 5 | 4 | 3 | 2 | 1 | 9 |
| 617 | High cost of living | 5 | 4 | 3 | 2 | 1 | 9 |
| 618 | Poor educational facilities for children | 5 | 4 | 3 | 2 | 1 | 9 |
| 619 | Poor access to higher education for yourself | 5 | 4 | 3 | 2 | 1 | 9 |
| 620 | Work is far from home | 5 | 4 | 3 | 2 | 1 | 9 |
| 621 | Poor relationship (unsupportive) with case team leader/CEO/Medical director/ or head of health center | 5 | 4 | 3 | 2 | 1 | 9 |

Section VII: Turnover intention assessment

Now I want you to think about your intention to remain in your current job or to leave it. If you were to consider leaving your current job position, how important would each of the following factors be in that decision? Use a 5-point scale to answer, where:

5=Strongly agree 4= Agree 3= Neutral 2= Disagree 1= Strongly disagree

| # | If you will to consider leaving your current job position, how much do you agree or disagree with the following factors be in that decision? | 5= Strongly agree | 4= Agree | 3= Neutral | 2= Disagree | 1= Strongly disagree |
|-----|--|-------------------|----------|------------|-------------|----------------------|
| 701 | I am fed up with my current hospital/health center job and am earnestly gathering information to find a new job. | 5 | 4 | 3 | 2 | 1 |
| 702 | I would quit my job at this hospital/health center without a second thought, if I found another job with conditions that suited me. | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|--|---|---|---|---|---|
| 703 | I think I would quit my job immediately. | 5 | 4 | 3 | 2 | 1 |
| 704 | I am so fed up with my job that I might not be able to endure it any longer. | 5 | 4 | 3 | 2 | 1 |
| 705 | I am fed up enough with my job to consider being intentionally absent or late for work. | 5 | 4 | 3 | 2 | 1 |
| 706 | I have talked seriously with my family or close friends about quitting or changing my job. | 5 | 4 | 3 | 2 | 1 |

Section VIII: Additional Questions about turnover

| Q.N | Questions | Possible choice/ Answers |
|------------|---|--|
| 201 | Do you plan to leave the current health facility? | Yes 2. No |
| | If Q.201 yes, when do you leave this institution? | 1. Within one year 4. 3- 4 years 2. 1-2 years 5. 4- 5 years 3. 2-3 years 6. After 5 years |
| | Intention after leaving the institution where do you prefer to work? | 1. Working in other governmental organization 2. Work in NGO/private 3. Work in non-health institution 4. Running own business 5. Other (specify) _____ |
| | What kind of job are you looking for? | 1. Job in same profession 2. Job in another profession 3. Other (specify) _____ |
| | You have workmates (other workers) who left your organization within the last year. | 1. Yes 2. No |
| | If Q.206 yes, why did workmate leave the organization? | 1. Personal or family reasons 2. Rural nature of the working environment 3. Due to conflict with management bodies Other (specify) _____ |

THANK YOU FOR YOUR TIME AND COOPERATION

Questions for in-depth interview

Name of health facility _____

Age _____

Sex _____

Profession _____

Service year _____

1. How you feel the problem of health workers turnover in this hospital/health center?
2. Based on your experience on human resource management, what impact does health workers turnover on:-
 - a. Health system? _____
 - b. Community _____
 - c. Government and hospital/health center _____
3. Can you estimate the magnitude/extent of the turnover of this institution?
4. What do you think reason/ causes for the turnover of health workers?
5. From your organization, which category/ department most vulnerable for turnover and why?
6. What do you think the possible solution to solve the problem?
7. Can you mention some policy measures currently undertaking to improve health worker turnover?
8. What you think will be the role of your institution to solve the problem?
9. What you recommend to reduce health workers turnover in public health system as general?
10. From experience, what possible suggestion do you have to improve health workers turnover?
11. If you have other idea you can add.

Thank you for sharing your thought, perceptions and experience!

Questions for turnover from secondary data

| S,N | Needed information | Data from register | Guidance how to fill |
|-----|--|--|--|
| 1 | No of health professionals left health facilities from 2002-2006 E.C | Health centers/Hospital Male _____ Female _____ | Fill all health professionals who left your health institution between 2010-2014 E.C |
| 2 | Age | 1. <25 = _____ 2. 25- 35 = _____ 3. 35 - 45 = _____ 4. ≥46 = _____ | Put them in their age category. |
| 3 | Educational status | 1. Diploma _____ 2. Degree _____ 3. Masters and above _____ 4. Other (specify) _____ | Put them in their educational status. |
| 4 | Professional categories | 1. Physician _____ 2. Health officer _____ 2. Laboratory _____ 3. Nurses or mid wife _____ 4. Pharmacy & druggists _____ 5. Others(specify) _____ | Put them in their professional category. |

| | | | |
|---|---|--|--|
| 5 | Work experience of health workers when they leave your institution. | 4. Below 1year _____ 5. 1-4 years _____ 6. 5 years and above _____ | |
| 6 | Salary in birr during turnover | 1. <2000 _____ 2. 2001-3000 _____ 3. 3001 -40004 _____ 4. >4001 _____ | |

2. Questionnaires in Afan Oromo Language

Kutaa I: Seensa

Gaaffiin kun ogeessota fayyaa godina Horroo guduru wallaggaa dhaabbata fayyaa mootummaa keessa hojjetaa jiran waa'ee dhaabbata fayyaa amma irra hojjechaa jiran gaafachuuf kan qophaa'e dha.

Qajeelfama

Qorannoon kun kan inni gaggeeffamu Yuunivarsiitii Jimmaa koollejjii saayinsii fayyaa, muummee barnoota "Health economics, management and policy" tiin yemmuu ta'u, sababa ogeessi fayyaa itti dhaabbilee fayyaa mootummaa gadi lakkisuu fi gadi lakkisuuf yaadu ogeessa fayyaa godina kanaa gaafatee adda baasuun fala isaa barbaaduuf kan hojjetamu dha.

Kaayyoon isaas, itti quufinsa hojii fi bakka hojii ilaalchisee kanneen gadi lakkisii hojjetaaf qooda qabanii fi rakkoo ka'umsaa ta'an adda baasuun furmaata kennuu dha.

Haaluma kanaan, gaaffiin kun gaaffilee adda addaa of keessaa kan qabu ta'ee, deebistanii xumuruuf daqiiqaa 15-20 qofa kan isin fudhatu dha. Gaaffileen jiran qajeelfama mataa isaanii qabu. Kanaafuu, yeroo gaafficha deebistan qajeelfama isaanii sirriitti dubbisuun deebisa. Yeroo deebii keessan deebistan waan isinitti dhagahame fi waan ofii keessanii sirriitti itti amantan osoo namaan hin mari'atiin amanamummaan waan dhugaa ta'e deebisaa ykn barreessaa. Sababni isaa deebiin isin kennitan rakkoo hojjetaa fayyaa hiikuu keessatti gahee olaanaa qaba waan ta'eefi. Odeeffannoon isin kennitan karaakamiinuu isin faana wal hin qabatu waan ta'eef icciitiin keessan eegamaa dha. Hirmaannaan keessan fedhiin ta'uu qaba, yoo qorannoo kana keessatti hirmaachuuf fedha hin qabdan ta'ee mirgi keessan eegamaa dha. Kanaaf, bilisummaan isinitti dhagahamuu qaba.

Erga gaaffilee kanneen guuttanii xumurtanii al tokko irra deebi'aatii seeraan guutuu keessan mirkaneeffadha. Dhuma irratti waraqaa gaaffii kana poostaan saamsuun nuuf deebisaa.

Eeyyamamaa/ttuu ta'uu keessaniif galatoomaa!

101. Guyyaa itti daataan funaaname _____

102. Maqaa aanaa/ bulchiinsa magaalaa _____

Kutaa II: Odeffannoo walii galaa

Deebii keessan barreessuun ykn itti maruun agarsiisaa.

| Lakk | Gaaffilee | Qabxilee filannoo/Deebii |
|------|---------------------------------------|--|
| 201 | Umrii keessan | 1. <25 2. 25- 35 3. 35 - 45 4. 45 - 55 5. ≥55 |
| 202 | Saala | 1. Male 2. Female |
| 203 | Sabummaa | 1. Oromoo 2. Guragee 3. Tigree 4. Amaara 5. kan biro(Ibsaa) _____ |
| 204 | Amantaa keessan | 1. Orthodoxii 2. Catholikii 3. Muslima 4. Protestantii 5. kan biro(Ibsaa) _____ |
| 205 | Haala fuudhaa fi heerumaa ilaalchisee | 1. kan hin fuune/hin eerumne 2. kan fuudhe/heerumte 3. kan wal hiikan/adda bahan 4. kan iraa du'e/duute |
| 206 | Bakka dhalootaa keessan eessa ture? | 1. Baadiyyaa 2. Magaala |
| 207 | Sadarkaa barnootaa ilaalchisee | 1. Diplomaa 2. Digrii 3. Mastersii fi isaa ol 4. kan biro(Ibsaa) _____ |

| | | | |
|-----|---|---|---|
| 208 | Gosa ogummaa keessanii | 1. Doktora 2. Farmasii fi druggists 3. Nursii or deessistuu 4. Environmental health | 5. Health officer 6. Laboratory 7. Anesthesia 8. kan biro(Ibsaa) _____ |
| 209 | Tajaajila sektera Fayyaa keessatti akka walii galaatti qabdan | 1. Waggaa 1 gadi 2. Waggaa 1-5 3. Waggaa 6-10 | 4. Waggaa 11-15 5. Waggaa 16-20 6. Waggaa 20 fi isaa ol |
| 210 | Dhaabbata amma irra hojjettan kana keessa waggaa meeqa hojjettan? | 1. Waggaa 1 gadi 2. Waggaa 1-5 3. Waggaa 6-10 | 4. Waggaa 11-15 5. Waggaa 16-20 6. Waggaa 20 fi isaa ol |
| 211 | Miindaan ji'aan argattan meeqa ta'a? | 1. <2000 2. 2001-3000 | 3. 3001 -4000 4. >4001 |
| 212 | Gosa dhaabbataa | 1. Buufata Fayyaa | 2. Hospitola |
| 213 | Haala maatii ilaalchisee | 1. Maatiikoo faanan jiraadha. 2. Maatiikoo irraa adda baheen jiraadha. 3. Maatii hin qabu. 4. kan biro (ibsaa) _____ | |
| 214 | Haala mana isin amma keessa jiraachaa jirtanii ilaalchisee, manni keessan:- | 1. kan dhuunfaa koo 2. kiraa ta'ee, mana gandaa 3. kiraa ta'ee, dhuunfaa irraa | |

| | | |
|-----|---|--|
| | | 4. dhaabbata fayyaan kan naaf kenname keessa 5. Maatii koo bira |
| 215 | Erga eebbifamtanii barnoota keessan fooyyeffattanii jirtuu? | 1. Eeyyen 2. Lakki |
| 216 | Dirqama dhaabbata fayyaa mootummaa keessa hojjechuu/tajaajiluu qabduu amma? | 1. Eeyyen 2. Lakki |

Kutaa III: Haala itti quufinsa Hojii ilaalchisee

Gaaffiin amma isiniif dhiyaatu kun hojii keessan ammaa ilaalchisee miira isinitti dhagayamu ilaalchiseetu dha. Yaadota armaan gadiitti dubbistan hundarratti hangam akka walii galtanii fi walii hin galle qabxilee 1 hanga 5 ittiin madaalaman kennuun ibsaa.

Kunis lakkoofsi:- 5= baay'een itti waliigala(*strongly agree*) 4= waliigala(*agree*) 3= bilisa (neutral) 2= walii hin galu(*disagree*) 1= Siruma itti walii hin galu(*strongly disagree*).

| lakk | Yaadota armaan gaditti dhiyaatanitti hangam itti walii galta ykn immoo itti walii hin galtu? | 5= baay'een itti waliigala | 4=walii gala | 3= bilisa | 2=walii hin galu | 1= Siruma itti walii hin galu. |
|------|--|----------------------------|--------------|-----------|------------------|--------------------------------|
| 301 | Waa hunda gaafan ilaalu ani hojii kootti gammadaa dha | 5 | 4 | 3 | 2 | 1 |
| 302 | Miindaan ani argadhu gahaa fi waanuman argachuu qabudha. | 5 | 4 | 3 | 2 | 1 |
| 303 | Hojjetoota mootummaa sektera biroo warra akka koo sadarkaa walfakkaataa irra jirru faana gaafan madaalu miindaan koo | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | gahaadha. | | | | | |
| 304 | Bakka hojii koo kanatti otoo carraan guddinaa dhufee, guddachuuf carraa akkan qabu natti dhaga'ama | 5 | 4 | 3 | 2 | 1 |
| 305 | Hojjetoota kan biroo sadarkaa kootti jiran faana gaafan of madaalu, faayidaan ani argadhu (fkn: durgoo, geejjiba, mana, fi k.k.f) gahaa dha. | 5 | 4 | 3 | 2 | 1 |
| 306 | Hojiin amma ani hojjedhu muuxannoo koo fi dandeettii kootiin kan wal simudha. | 5 | 4 | 3 | 2 | 1 |
| 307 | Gaheen hojii kootii, ifaan ifatti kan taa'ee kanan sirriiti beeku fi kan yeroo isaa eeggatedha | 5 | 4 | 3 | 2 | 1 |
| 308 | Waajjira kana keessatti hojii gaarii fakkenya qabu yoon hojjedhe, beekantii ittan argadha. | 5 | 4 | 3 | 2 | 1 |
| 309 | Itti gaafatamaan/hogganaan koo danbiilee bulchiinsaa hojjetoota mootummaa fi qajeelfamoota ana irratti kan raawwachiisu, seeranii fi madaallii isaa karaa eegeeni dha. | 5 | 4 | 3 | 2 | 1 |
| 310 | Itti gaafatamaa/hogganaa koo waliin kan qopheessinee fi waliin hojii irra kan oolchinu karoora hojii qabna. | 5 | 4 | 3 | 2 | 1 |
| 311 | Madaalliin/gamaggamni/ koo kan inni taasifamu karoora hojii anaaf kenname | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|---|---|---|---|---|---|
| | irratti hundaa'eetu. | | | | | |
| 312 | Waajjirri koo hijii ani hojjedhuuf gatii /value/ akka inni kennu natti dhaga'ama. | 5 | 4 | 3 | 2 | 1 |
| 313 | Deeggarsi ogummaa yeroo nabarbaachisutti, hogganaan koo deeggarsa naaf kenna. | 5 | 4 | 3 | 2 | 1 |
| 314 | Namoonni natti dhiyaatanii fi maatiinkoo mana yaalaa kanatti dhufanii akka yaalaman nan jajjabeessa. | 5 | 4 | 3 | 2 | 1 |
| 315 | Bakkan hojjechaa jiru kanatti hojii kootti milkaa'aa akkan ta'uuf leenjii nabarbaachisu fudheera. | 5 | 4 | 3 | 2 | 1 |
| 316 | Mana hojii kana keessatti deeggarsa ogummaa yeroo nabarbaachisutti gorsa argachuu nan danda'a. | 5 | 4 | 3 | 2 | 1 |
| 317 | Dhaabbatichi dhukkuba HIV/AIDS fi balaa iddoo hojiitti naqunnamuu danda'an kam irraa iyyuu na eeguuf tarkaanfii qabatamaa ni fudhata. | 5 | 4 | 3 | 2 | 1 |
| 318 | Hawaasa naanoo kanaa ani ogummaa fayyaatiin tajaajilaa jiru kana akkan qaama isaa ta'ettan of ilaala. | 5 | 4 | 3 | 2 | 1 |
| 319 | Hawaasni naannoo kanaa hojii kootiif gatii ni kenna jedheen yaada. | 5 | 4 | 3 | 2 | 1 |
| 320 | Hogganaan dhaabbata fayyaa kanaa hojii isaa hojjechuuf gahumsa kan qabuu fi | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | bakkichaaf nama maludha. | | | | | |
| 321 | Hojjetoota mana hojii kootii/Co-workers/ faana walitti dhufeenya gaariin qaba. | 5 | 4 | 3 | 2 | 1 |
| 322 | Akka waliigalaatti gareen keessa hojjedhuu fi hojjetoota adeemsa hojii hundaa gidduu haamileen hojii jiru gaariidha. | 5 | 4 | 3 | 2 | 1 |
| 323 | Yoo xiqqaate, waggoota lamaan dhufan asuma bakkan amma jiru hojjechuun yaada/barbaada. | 5 | 4 | 3 | 2 | 1 |

Kutaa IV: haala hojii fi haala jireenyaa ilaalchisee

Gaaffiin isin armaan gaditti gaafatamtan immoo haala hojii dhaabbata keessan keessatti argamuuti. Egaa tokkoon tokkoon yaadota ibsamanitti hangam akka itti walii galtanii fi itti walii hin galle madaaluun lakkoofsa 1 hang 5 kennuun ibsaa.

Kunis lakkoofsi:- 5= baay'een itti waliigala(*strongly agree*) 4= waliigala(*agree*) 3= giddu galeessa(*neutral*) 2= walii hin galu(*disagree*) 1= Siruma itti walii hin galu(*strongly disagree*)
kanneen jedhani dha

Hubachiisa: yoo qabxiin ibsame kan isin hin ilaallannedha ta'e lakkoofsa 9 filachuu ni dandeessu.

| lakk | Yaadota armaan gaditti dhiyaatanitti hangam itti walii galta ykn immoo itti walii hin galu? | 5= baay'een ittiwaliigala | 4= waliigala | 3= giddu galeessa | 2= walii hin galu | 1=Siruma itti walii hin galu. | 9= nah in ilaallatu |
|------|--|---------------------------|--------------|-------------------|-------------------|-------------------------------|---------------------|
| 401 | Baay'inni hojii/work load/ ana irra jiru keessa bahuu kanan danda'u dha. | 5 | 4 | 3 | 2 | 1 | 9 |
| 402 | Hojii koo qixa sirrii fi karaa balaa irraa bilisa ta'een raawwachuuf kan nabarbaachisan meesholeen (kan akka gloves, needles, bandages, sutures, | 5 | 4 | 3 | 2 | 1 | 9 |

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| | disinfectants fi k.k.f) gahaan qaba. | | | | | | |
| 403 | Hojii koo qixa sirrii fi karaa ariifataa ta'een raawwachuuf meeshaalee (kan akka ultra sound, x-ray, blood pressure cuffs and k.k.f) gahaa ta'e nan qaba. | 5 | 4 | 3 | 2 | 1 | 9 |
| 404 | Dhaabbatni ani keessa hojjedhu dhiyeessii qorichaa gahaa ta'e qaba. | 5 | 4 | 3 | 2 | 1 | 9 |
| 405 | Bakki ani itti hojii koo hojjedhu /manni isaa/qulqullina kan qabudha. | 5 | 4 | 3 | 2 | 1 | 9 |
| 406 | Guyyaa baay'ee laaqana koo nyaachuuf yeroo nan qaba. | 5 | 4 | 3 | 2 | 1 | 9 |
| 407 | Manan jiraadhu keessatti bishaan dhugaatii qulqulluu nan argadha. | 5 | 4 | 3 | 2 | 1 | 9 |
| 408 | Bakka hojii kootti bishaan dhugaatii qulqulluu nan argadha | 5 | 4 | 3 | 2 | 1 | 9 |
| 409 | Manan jiraadhu keessatti ibsaa /elektrika/ nan argadha. | 5 | 4 | 3 | 2 | 1 | 9 |
| 410 | Bakkan hojjedhu ibsaan /elektrikni/ ni jira | 5 | 4 | 3 | 2 | 1 | 9 |
| 411 | Bakkan hojjedhu tajaajilli interneetii saffisaan ni jira. | 5 | 4 | 3 | 2 | 1 | 9 |
| 412 | Ijoolleekoo bakkan itti barsiisu mana barumsaa gaarii nan argadha. | 5 | 4 | 3 | 2 | 1 | 9 |
| 413 | Manaa gara hojii dhaquuf tajaajilli geejjibaa amansiisaa fi ariifataa ta'e nan | 5 | 4 | 3 | 2 | 1 | 9 |

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| | argadha. | | | | | | |
| 414 | Soda hojii dhabuu ykn hojii koo irraa ari'atamuu hin qabu. | 5 | 4 | 3 | 2 | 1 | 9 |
| 415 | Hawaasni ani keessa hojjedhu gabaa /suuqii/ gaarii fi bakka itti bashannanan gahaa ta'e qaba. | 5 | 4 | 3 | 2 | 1 | 9 |

Kutaa V:- Barbaachisummaa kanfaltii fi faayidaalee adda addaa

Ammammoo, gaaffileen isiniif dhiyaatan kanfaltii fi faayidaalee manni hojii tokko hojjetaa isaatiif guutuu qabu irratti yaada isin qabdan ilaalchisee dha. Kanaaf qabxilee armaan gadii irratti isin gama keessaniin hojii amma irra jirtan kana irra turuuf barbaachisoodha jettanii kan yaaddan madaallii abbaa qabxii 1hanga 5 fayyadamuun ibsaa.

Qabxileen kunis:- 5=*Garmalee barbaachisaa dha* (extremely important), 4= *Baay'ee barbaachisa* (very important), 3= *ni barbaachisa(important)*, 2= *Hanga tokko ni barbaachisa(somewhat important)*, 1= *Hin barbaachisu(not important)* kan jedhudha.

| Lakk | Qabxileen waa'ee kanfaltii fi faayidaalee armaan gadiitti dhiyaatan waa'ee as turuu murteessuu keessaniif hangam barbaachisoodha? | 5=Garmalee ebarbaachisaa dha | 4=Baay'ee barbaachisa | 3=ni barbaachisa | 2=Hanga tokko ni barbaachisa | 1= Hin barbaachisu |
|------|---|------------------------------|-----------------------|------------------|------------------------------|--------------------|
| 501 | Miindaa | 5 | 4 | 3 | 2 | 1 |
| 502 | Faayidaalee yeroo hojii gadi dhiisan (kan akka sooramaa, kanfaltii tajaajilaa k.k.f) | 5 | 4 | 3 | 2 | 1 |
| 503 | Kanfaltii manaa ykn mana jireenyaa tolaa argachuu | 5 | 4 | 3 | 2 | 1 |
| 504 | Durgoo geejjibaa argachuu | 5 | 4 | 3 | 2 | 1 |
| 505 | Faayidaa/kanfaltii balaa tiif kanfalamu | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|---|---|---|---|---|---|
| 506 | Kanfaltii yeroo dabaree hojii/duty allowance/ | 5 | 4 | 3 | 2 | 1 |
| 507 | Tajaajila yaalii tolaa maatii keessaniif | 5 | 4 | 3 | 2 | 1 |
| 508 | Kanfaltii balaa sababa ogummaa tiif namarra gahuuf kanfalamu | 5 | 4 | 3 | 2 | 1 |
| 509 | Kanfaltii/faayidaa nyaataa (jechuun yeroo dabaree hojii kutaa dahumsaa, baqaqsanii yaaluu, fi k.k.f keessatti dhiyeessii nyaataa) | 5 | 4 | 3 | 2 | 1 |

Kutaa VI:- Sababoota hojii gadhiisuuf nama geessisan

Kanatti aansee, gaaffileen isin gaafatamtan hojii amma irra jirtan kana gadhiisuuf ykn turuuf sababoota isin dandeessisani dha. Egaa, amma hojii keessan gadhiisuuf yoo yaaddan qabxilee armaan gadii kana keessaa kamtu caalaatti isiniif barbaachisaa ta'a? Qabxilee madaallii 1 hanga 5 ittiin madaalaatii ibsaa.

Kunis:- 5= *Baay'ee baay'ee barbaachisaa (extremely important)* 4= *baay'ee barbaachisaa (very important)* 3= *barbaachisaa (important)* 2= *hanga tokko barbaachisaa (somewhat important)* 1= *hin barbaachisu (not important) warren jedhanidha.* 9=yoo isin hin ilaallatu ta'e.

| Lak | Osoo hojii keessan ammaa gadi dhiisuuf murteessitanii, qabxileen armaan gadii kun gaheen isaan murtoo keessan keessatti qaban hangami? | 5=Baay'ee baay'ee barbaachisaa | 4=baay'ee barbaachisaa | 3= barbaachisaa | 2=hanga tokko barbaachisaa | 1=hin barbaachisu | 9= hin na ilaallatu |
|-----|--|--------------------------------|------------------------|-----------------|----------------------------|-------------------|---------------------|
| 601 | Kanfalii gadi aanaa | 5 | 4 | 3 | 2 | 1 | 9 |
| 602 | Baay'ina hojii /work load/ | 5 | 4 | 3 | 2 | 1 | 9 |
| 603 | Yeroon hojii dheerachuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 604 | Oogii fi loogii akkasumas miidhaa hogganaa irraa ana irra gahu. | 5 | 4 | 3 | 2 | 1 | 9 |

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| 605 | Bakka hojiitti meeshaaleen hojii guutamuu dhabuu /hir'achuu/ | 5 | 4 | 3 | 2 | 1 | 9 |
| 606 | Leenjii hojii irratti kennamuuf carraa gahaa ta'e dhabuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 607 | Guddinaaf carraan gahaan dhibuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 608 | Hojii gaarii raawwatameef beekamtiin dhibuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 609 | Bakka hojiitti walii galteen dhibuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 610 | To'annoon hojii laafuu fi duubdeebiin nama ijaaru dhibuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 611 | Hojii irratti wabii nageenyaa dhabuu /balaa sodaachuun yoo jiraate/ | 5 | 4 | 3 | 2 | 1 | 9 |
| 612 | Rakkoon geejjibaa jiraachuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 613 | Mana jireenyaatti dhiyeessiin tajaajila bu'uuraa kan akka ibsaa, bishaanii fi k.k.f dhibuu. | 5 | 4 | 3 | 2 | 1 | 9 |
| 614 | Mana hojiitti dhiyeessiin tajaajila bu'uuraa kan akka ibsaa, bishaanii, interneetii fi k.k.f dhibuu | 5 | 4 | 3 | 2 | 1 | 9 |
| 615 | Hanqina mana jireenyaa yoo jiraate | 5 | 4 | 3 | 2 | 1 | 9 |
| 616 | Maatii fi firoota faana sababa hanqina bilbilaaf wal arguu yoon dadhabe | 5 | 4 | 3 | 2 | 1 | 9 |
| 617 | Mi'aayina jireenyaa | 5 | 4 | 3 | 2 | 1 | 9 |
| 618 | Ijoollee kootiif manni barumsaa gaarii | 5 | 4 | 3 | 2 | 1 | 9 |

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| | ta'e yoo dhibe | | | | | | |
| 619 | Ofii kootiif carraa barnoota olaanaa /itti aanu/ yoon dhabe | 5 | 4 | 3 | 2 | 1 | 9 |
| 620 | Bakki hojii mana jireenyaa koorraa fagoo yoo ta'e | 5 | 4 | 3 | 2 | 1 | 9 |
| 621 | Walitti dhufeenyi gaggeessitoota waliin jiru laafaa ta'uu ykn haalli gaggeessummaa mana hojii kanaa kan hojiif nama deeggaru ta'uu dhabuu | 5 | 4 | 3 | 2 | 1 | 9 |

Section VII: Gaaffii waa'ee yaada gadhiisanii deemuu ilaallatu.

Mana hojii kana yoo gadi dhiistanii deemuu barbaaddu ta'e, murtee keessaniif qabxileen armaan gaditti tarra'an kunneen hangam barbaachisoodha? Kanaaf qabxilee madaallii 5 kan qabu keessaa filachuu hanga itti waliigaltan madaalaati kaa'aa. Isaanis:

5=Baay'een itti waliigala 4= Ittin walii gala 3= bilisa (Neutral) 2= Itti walii hin galu 1= Siruma itti walii hin galu

| # | Hojii amma hojjechaa jirtan gadhiistanii deemuu keessatti, Qabxilee armaan gadii kanatti hangam walii galu ykn walii hin galtan? | 5=Baay'een waliigala | 4= Ittin walii gala | 3= bilisa (Neutral) | 2= Itti walii hin galu | 1= Siruma itti walii hin galu |
|-----|--|----------------------|---------------------|---------------------|------------------------|-------------------------------|
| 701 | Hojiin waajjira kanaa baay'ee na nuffisiiseera, kanaaf odeeffannoo hojii haaraa ciminaan funaannachaan jira. | 5 | 4 | 3 | 2 | 1 |
| 702 | Hojii waajjira kanaa otoon carraa hojii kan biraa argadhee otoon waatokko irra deebi'ee hin yaadiin nan gadhiisa. | 5 | 4 | 3 | 2 | 1 |
| 703 | Hojiin amma irra jiru kana nan gadhiisa jedheen | 5 | 4 | 3 | 2 | 1 |

| | | | | | | |
|-----|---|---|---|---|---|---|
| | yaada. | | | | | |
| 704 | Hojiin kun na nuffisiisee waan jiruuf waanan obese irra turu natti hin fakkaatu. | 5 | 4 | 3 | 2 | 1 |
| 705 | Hojiin kun na nuffisiisee waan jiruuf beekaa hojiirraa hafaa akkasumas immoo guyyaafadheen hojii seenaa jira. | 5 | 4 | 3 | 2 | 1 |
| 706 | Hojii kana nan gadhiisa ykn nan jijjiira jedhee maatii kootti ykn hiriyoota kootti sirriitti himeera | 5 | 4 | 3 | 2 | 1 |

Kutaa VIII: Waa'ee hojii gadhiisuu ilaalchisee gaaffilee dabalataa

| Lakk | Gaaffii | Filannoo /deebii | Ibsa |
|------|--|--|--------------------------------|
| 801 | Dhaabbata fayyaa amma keeaa hojjechaa jirtan kana gadhiistanii deemuuf karoora ni qabdu? | 2. Eeyyen 2. Lakki | Yoo Lakki ta'e gara 805 dhaqaa |
| 802 | Yoo gaaffii 801 Eeyyen jettanii deebistaniittu ta'e, dhaabbata fayyaa kana yoom gadhiistanii deemuuf yaaddu? | 1. Waggaa tokko keessatti 2. Waggaa 1-2 keessatti 3. Waggaa 2-3 keessatti 4. Waggaa 3- 4 keessatti 5. Waggaa 4- 5 keessatti 6. Waggaa 5 booda | |
| 803 | Erga dhaabbata Fayyaa kana gadhiistanii deemtanii booda, eessa hojjechuu feetu/barbaaddu? | 1. Bakka biraa ta'ee dhaabbata fayyaa mootummaa keessa. 2. Dhaabbata mitmootummaa/dhuunfaa 3. Dhaabata Fayyaan ala/non health 4. Hojii dhuunfaa koo banachuu 5. Kan biro/ibsaa _____ | |
| 804 | Erga gadhiistanii deemtanii booda, hojii akkamii hojjechuuf yaadaa jirtu? | 1. Hojii ogummaa kootiitiin/Fayyaadhaan 2. Ogummaa kan biraatiin/Fayyaan ala 3. Kan biro/ibsaa _____ | |

| | | | |
|-----|---|---|--|
| 805 | Hiriya ykn nama waliin hojjettan (hojjetaa kan biroo) waggaa tokkoon asitti dhaabata fayyaa kana gadhiisee deeme beektu/jiraa? | <ol style="list-style-type: none"> 1. Eeyyen 2. Lakki | |
| 806 | Yoo gaaffii 805 Eeyyen jettanii deebistaniittu ta'e, hiriyaan keessan ykn namni isin waliin hojjechaa turtan sun sababa maaliif gadhiisee deeme/te? | <ol style="list-style-type: none"> 1. Rakkoo dhuunfaa ykn sababa maatiitiif 2. Naannoo hojii kanaa mijataa waan hin taaneef /baadiyyaa waan ta'eef/ 3. Gaggeessitootaan waan wal dhabeef 4. Kan biroo/ibsaa _____ | |

YEROO KEESSAN WAAN NUUF KENNITANIIF GALATOOMAA

Gaaffilee gaafannoo gadifageenyaa /In-depth/nama dhuunfaaf qophaa'e

Maqaa dhaabbataa _____

Umrii _____

Saala _____

Bara tajaajilaa _____

1. Waa'ee rakkoo hojjetootni dhaabbata fayyaa kana gadhiisanii deemu akkamittiin ilaaltu ykn maaltu isinitti dhagahama?
2. Muuxannoo waa'ee bulchiinsa hojjetootaa irraa qabdan irraa kaatanii gaafa ilaaltan, hojjetootni dhaabbata fayyaa gadhiisanii deemuun rakkoo maal maal dhaqqabsiisa?
 - a. Sirna kenniinsa tajaajila fayyaa irratti? _____
 - b. Hawaasa bal'aa irratti _____
 - c. Mootummaa/dhaabata fayyaa kana irratti _____
3. Waggaa waggaan baay'ina/hanga hojjetaa mana hojii kana gadhiisu tilmaamuu ni dandeessuu?
4. Sababa hojjetaan dhaabbata kana itti gadhiisee deemuuf maali jettanii yaaddu?
5. Yeroo baay'ee dhaabbata kana gadhiisanii kan deeman muummee/department/ kami?
6. Falli ittiin akka hojjetaaan dhaabbata fayyaa gadhiisee hin deemne taasisnu maali jettanii yaaddu?
7. Tarkaanfii sirnaa/policy/ akka hojjetaan dhaabbata itti ramadame keessa akka turu taasisuuf fudhatamuu qabu maal fa'i?
8. Gaheen dhaabata keessanii rakkoo kana furuu keessatti qabu maali?
9. Sektera fayyaa keessatti hojjetaan gadi lakkisee akka hin deemne gochuuf maaltu godhamuu qaba jettanii yaaddu?
10. Muuxannoo qabdan irraa, gadhiisii hojjetaa furuuf/fooyyessuuf maaltu fala ta'a jettanii yaaddu?
11. Yoo yaada addaa ykn dabalataa qabaattan dabluu ni dandeessu.

Waan yaada keessan nuuf hirtaniif galatoomaa!

Guca galmeerraa hojjetootni dhaabbata fayyaa gadhiisanii deeman ittiin funaanamu

| Lakk | Odeeffannoo barbaachisan | Galmeerraa | Qajeelfama hordofaman |
|------|---|--|---|
| 1 | Baay'ina hojjetoota bara 2002-2006 A.L.I tti dhaabata fayyaa gadhiisanii deeman | Dhiira _____ Dhalaa _____ | Hojjetoota 2002 to 2006 A.L.I gadhiisan hunda saalaan |
| 2 | Umriin isaanii hangami? Waggaadhaan | 4. <25 = _____ 5. 25- 35 = _____ 6. 35 - 45 = _____ 7. ≥ 46 = _____ | Umriidhaan |
| 3 | Sadarkaan barumsa isaanii maal ture? | 1. Diploma _____ 3. Masters fi isaa ol _____ 2. Digirii _____ 4. kan biraa(ibsaa) _____ | |
| 4 | Gosti ogummaa isaanii maal ture? | 1. Doktora _____ 4. Nurses or deessistuu _____ 2. Qondaala Fayyaa(HO) _____ 5. Farmasii _____ 3. Laboratorii _____ 6. kan biraa(ibsaa) _____ | |
| 5 | Waggaa meeqa erga hojjetanii booda asii deemani? | 1. Waggaa 1 gadi _____ 2. Waggaa1-4 _____ 3. Waggaa 5 fi isaa ol _____ | Bara tajaajila isaanii |
| 6 | Miindaan isaan yeroo sana argatan meeqa ture? | 1. <2000 _____ 2. 2001-3000 _____ 3. 3001 -40004 _____ 4. >4001 _____ | Miindaa isaanii |

Galatoomaa!

3. Variables loaded by Principal Component analysis

| Variables loaded by PCA | Components | | Name given |
|---|------------|-------|--------------------|
| My salary package | | .891 | Remuneration |
| My salary is fair compared to other staff | | .893 | |
| opportunity for promotion | .651 | | Management system |
| Recognition for good work | .659 | | |
| Work plan developed with supervisor | .845 | | |
| Annual performance appraisal | .796 | | |
| Organization value my work | .737 | | |
| Encourage family and friend to seek care here | .808 | | |
| Part of local community | .756 | | |
| Community value my work | .786 | | |
| Over all moral level of team is good | .768 | | |
| Housing allowance | | .770 | |
| Assistance with transportation | | .774 | |
| Risk allowance | | .840 | |
| Duty allowance | | .849 | |
| Health care for family | | .836 | |
| Professional risk/hazard allowance | | .835 | |
| My work load is reasonable | .585 | | Working conditions |
| Supply i need to do my job | .631 | | |
| Access to drug and medication | .797 | | |
| My work space is clean | .730 | | |
| At home safe and clean water | | -.684 | Living conditions |
| I am not worried about losing my job | | .740 | |
| Transportation problem | .779 | | Infrastructure |
| Lack of housing facilities | .820 | | |
| Access to telephone | .879 | | |

| | | | |
|--|------|-------|------------------|
| High cost of living | .790 | | |
| Long hours work | | -.707 | Long hour work |
| Poor educational facility for children | | .788 | |
| Transportation problem | .710 | | work environment |
| Poor/lack of Utilities at home | .802 | | |
| Poor/lack of Utilities at work | .764 | | |
| Lack of housing facilities | .797 | | |
| High cost of living | .725 | | |
| Work is far from home | .710 | | |