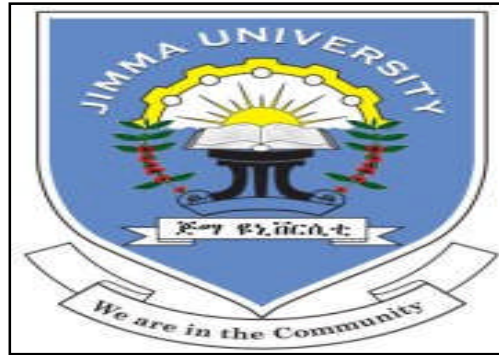


# Assessments of the magnitude and factors affecting the turnover of Health workers in West Amhara Region, Ethiopia



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A research project submitted to Jimma University, College of Public Health and Medical Sciences, Department of Health Planning and Health Services Management, for partial fulfillment of the requirement for the Degree of Master of Science in Hospital and Health Care Administration (MHA)

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West Amhara Region, Ethiopia

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## **Abstract**

**Background:** Staff turnover can be described as the total movement of employees in and out of an organization. Turnover is a serious problem for the hospitals suffer the loss of job specific skills, disruption in quality health care service and incur the costs of hiring and training new workers. So this issue facing the hospital managers to provide quality health care for the community. Health worker turnover is a global problem, the problem more serious both in Africa & Ethiopia. West Amhara regional state public hospitals are also the victim of this problem.

**Objective:** To assess health workers turnover and associated factors associated in West Amhara region public hospitals Ethiopia.

**Methods:** A cross sectional retrospective document review & qualitative focus group discussion were conducted in west Amhara region public hospitals among five hospitals randomly selected. Documents of health worker from 2007-2011 was reviewed & management team members in each the study hospitals were included in FGD. The data was analyzed using SPSS windows version 16.0. Univariate and multivariate analysis were done using chi-square test and binary logistic regression respectively. The results were presented by tables.

**Results:** The finding of the present study revealed that among 885 health worker's document reviewed 327 (36.9%) respondents were leaving the hospitals and higher proportion 237 (72.5%) of the health worker leaving the hospitals were in the age group 21-30 years. In multivariate analysis age, marital status, and service duration were independently and significantly associated with health workers turnover.

**Conclusion & Recommendation:** The study showed that reasons for turnover/ leaving was lack of retention mechanism so that significant numbers may have been retained if retention strategies were formulated to promoting professional development, managerial support, or improved professional practice environment & providing both financial & non financial incentives had been introduced.

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## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	IV
TABLE OF CONTENTS.....	V
LIST OF TABLES .....	VII
LIST OF FIGURES .....	VIII
ABBREVIATIONS .....	IX
CHAPTER: ONE INTRODUCTION.....	1
1.1 BACK GROUND .....	1
1.2. STATEMENT OF THE PROBLEM.....	2
CHAPTER 2: LITERATURE REVIEW .....	4
REPORTED VACANCY RATES .....	5
CONCEPTUAL FRAME WORK FOR THE STUDY .....	8
CHAPTER 3: SIGNIFICANCE OF THE STUDY .....	9
CHAPTER 4: OBJECTIVES.....	10
4.1 GENERAL OBJECTIVE.....	10
4.2 SPECIFIC OBJECTIVES .....	10
RESEARCH QUESTIONS .....	10
CHAPTER 5: METHODS AND MATERIALS .....	11
5.1 STUDY AREA & PERIOD.....	11
5.2 THE STUDY DESIGN .....	11
5.3. POPULATIONS.....	11
5.3.1 <i>Source population</i> .....	11
5.3.2 <i>Study population</i> .....	11
5.3.3 <i>Inclusion criteria:</i> .....	12
5.3.4 <i>Exclusion criteria</i> .....	12
5.4 SAMPLE SIZE & SAMPLING TECHNIQUE .....	12
5.5 DATA COLLECTION PROCEDURES & MEASUREMENTS.....	14
5.5.1 <i>Variables</i> .....	14
5.5.2 <i>Data collection instrument</i> .....	14

5.5.3 <i>Data collection method</i> .....	14
5.5.4 <i>Data collectors' selection &amp; training</i> .....	14
5.5.5. <i>Data quality control measures</i> .....	15
5.5.6. <i>Data analysis &amp; interpretation procedures</i> .....	15
5.5.7. <i>Dissemination plan</i> .....	15
5.6. OPERATIONAL DEFINITION .....	15
5.7. LIMITATION OF THE STUDY .....	16
5.8 ETHICAL CONSIDERATIONS .....	16
CHAPTER 6: RESULTS .....	17
6.1. SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS .....	17
6.2 RESULTS OF THE FOCUS GROUP DISCUSSION .....	20
6.2.1 <i>Factors That Made health worker Stay&amp; leave in public hospitals.</i> .....	20
6.2.1 <i>.Summary Of Major Findings From Focus Group Discussion</i> .....	21
6.3. UNIVARIATE ASSOCIATIONS OF HEALTH WORKERS TURNOVER .....	21
6.4. MULTIVARIATE ASSOCIATIONS WITH HEALTH WORKERS TURNOVER.....	24
CHAPTER 7: DISCUSSION.....	26
CHAPTER 8: CONCLUSION AND RECOMMENDATIONS .....	28
8.1 CONCLUSION.....	28
8.2 RECOMMENDATIONS .....	28
REFERENCES .....	30
ANNEX (1): INFORMED CONSENT .....	33
ANNEX (2): CHECK LIST & QUESTIONS .....	34
ANNEX (3): QUESTION GUIDE FOR FOCUS GROUP DISCUSSION.....	37

## List of Tables

Table 1: Socio-economic & demographic characteristics of the participants by workers turn over, West Amhara region from August 20 to June 2013 .....	18
Table 2: Association between socio-economic, demographic variables and health workers turnover, West Amhara region from August 20, to June 2013 .....	22
Table 3: Multivariate associations with health workers turnover, West Amhara region from August 20, to June 2013 .....	25
Table 4: Check list for health workers turn over assessment document review 2012.....	35
Table 5: Number of health worker employed & left the employment from 2007-2011.....	36

## List of figures

Figure 1: Conceptual framework for assessment of health worker turns over in West Amhara Region, Ethiopia 2012(21).....	8
Figure 2: Diagram presentation of sampling procedure for the selection of study hospitals to conduct the assessment in five hospitals, in west Amhara region, Ethiopia, 2012 .....	13



## **ABBREVIATIONS**

**AMHF:** AFRICA MENTAL HEALTH FOUNDATION

**AIDS:** Acquired Infectious Disease Syndrome

**BLT:** Bulletin of the world health organization

**BSC:** Bachelor of Science

**CEO:** Chief executive officer

**DRC:** Democratic republic of Congo

**FGD:** Focus group discussion

**HIV:** Human immune deficiency virus

**HNP:** Health, nutrition & population

**IPAR:** Institute of policy analysis and research

**M&E:** Monitoring & evaluation

**MHA:** Master degree in healthcare & hospital administration

**MPH:** Master of public health

**MSC:** Master of Science

**SPSS:** Statistical package for social science

**UN:** United nation

**USA:** United state of America

**WHO:** World health organization

## **Chapter: one Introduction**

### **1.1 Back ground**

Staff turnover can be described as the total movement of employees in and out of an organization. Turnover is a serious problem for the hospitals suffer from the loss of job specific skills, disruption in quality health service and incur the costs of hiring and training new workers. So health worker turnover is recognized as a key issue for health and development in the worldwide. Policy-makers, planners & managers continue to seek effective means to recruit & retain staff (1).

Worker shortages are linked to three factors 1, decreasing student enrolment in health training institutions, 2, delays or freezes in hiring of qualified professionals & 3, high turnover among those already employed (2). Health worker shortages in sub- Saharan Africa drives from many causes including past investment short falls in pre service training, international migration, career changes among health workers, premature retirement ,morbidity among health workers& premature mortality (3). Recent research on the impact of voluntary employee turnover in health care organizations highlights the significant price firms pay for it. A conservative estimate of these costs is between 3.4% and 5.8% of the overall annual operating budget for an entire medical center. Health Service organizations often struggle with the challenge of providing services to their clients in a cost-effective manner. Research has shown that the cost and quality of services is negatively affected by low job satisfaction and high turnover among service workers. Resolving this problem requires a better understanding of the causes of low satisfaction and high turnover among these employees. (5).

## 1.2. Statement of the problem

Africa has 2.3 healthcare workers per 1000 population, compared with the Americas, which have 24.8 healthcare workers per 1000 population, WHO recommends a minimum of two physicians per 10,000 populations(6)

In Ethiopia despite the increase in the number of health workers, the population-to-health worker ratio remains very low compared to countries with similar income levels. This problem was compounded by two factors. First was the migration of highly qualified health personnel abroad and attractive employment conditions in the rapidly growing private sector. For example, the proportion of medical doctors employed in the public sector declined from 73 percent in 2002 to 44 percent in 2005. Second, lack of incentives to encourage skilled professionals, such as those to deploy medical doctors to rural areas, further increased the regional and urban–rural differential (7).

Health worker to population ratio is very low with regard to WHO standard, which are 2.8 health workers for 1000 population. In Ethiopia, 0.3 health workers for 1000 population as WHO estimation which is three times lower than even with that of sub Saharan Africa countries .In Amhara Region, unpublished report of the Regional Health Bureau indicated that one specialist and medical doctor serving for 324875 and 195623 respectively. This fact realizes that the health services provided in the region are under standard. This contributes for patient crowding and work burden on the health workers, that may be one cause of health worker turn over and poor health care services .review of unpublished reports of the Amhara Region Health Bureau shows that there are shortages of health workers who trained in different skill in the study area. After few year services health workers do not want to stay in one specific hospital especially in districts and remote areas. Human resource document of the investigated hospitals indicated that most of medical doctors were not stay more than two years. I did not get researches done in these hospitals in which the study will be conducted concerning this health workers turn over. This study will describe this key problem area in these hospitals and provide recommendations to the respective organization (8).

When a hospital has a high turnover rate, the quality of care rendered to its patients will be compromised, leading to medical and legal risks. An institution that suffers from a high turnover rate will suffer from low staff morale and decreased group cohesiveness. The investigator observed that staff turnover resulted in a series of negative effects on quality service delivery. To mention only a few, excessive turnover lowered employee morale because the gap created between departure of one worker and arrival of a replacement caused understaffing, overburdening of remaining staff and

deterioration of quality patient care with consequent medical and legal risks. It is important for health managers and organizations to understand the characteristics of workers who are at risk of moving, the patterns of movement in country versus out-migration and the reasons why workers make a decision to leave. Poor financial compensation and unsatisfactory working conditions are emerging as the most likely “push factors” causing workers to move between sectors or cross borders (9). So after identifying the factors which contributing for health worker turn the study was for ward recommendation which help managers, policy and decision makers to take action to manage health worker turn over and use full as a base line for another study.

## Chapter 2: Literature review

The inability of employers of health workers to create safe, satisfying and rewarding work conditions is a significant factor in the health care worker shortage in all countries. We know that health workers are very likely to reduce their hours at, or leave, health care workplaces that do not guarantee proper working conditions. Some health care workers will migrate to other countries in pursuit of a better work environment. Others will abandon the health profession entirely (10).

On the migration of physicians trained in Sub-Saharan Africa into the world's largest "consumer" of health workers, the USA. One study finds that more than 23% of physicians in the USA received their medical training abroad, mostly (64%) in low-income or lower-middle-income countries. 5,334 of these come from Sub-Saharan Africa, representing more than 6% of the stock of physicians in Sub-Saharan Africa. Furthermore, most of these Africans come from three countries, Nigeria, South Africa and Ghana, and 79% of these are trained at only 10 medical schools. The underlying causes for medical migration are well documented in the literature. Incentives to migrate typically involve a combination of "push factors" (unsatisfactory working or living conditions in the country of origin) and "pull factors" (attractive working or living conditions, availability of positions and active recruitment in the country of destination) (11).

Regarding the relative importance of financial versus non-financial factors, research finds little correlation between the supply of medical migrants and the size of the wage differential. The finding suggests that non financial factors play a crucial role in the decision to migrate (12)

Nurse and doctor to population ratios hide considerable variations among and within African countries. In South Africa there are 388 nurses and midwives to serve 100,000 people; there are 85 in Ghana and 26 in Malawi nurses & midwives to serve 100,000 people. Ghana has a doctor/population ratio of 1:17,489, compared to 1:300 for the United Kingdom. Concentration of health workers in urban areas also creates an imbalance in numbers and skill mix.

In Angola, 85% of health care professionals work in areas where only 35% of the population lives, Kenya's capital, Nairobi, has one doctor per 500 people, while remote Turkana district has one doctor to 160,000 people (13).

Experts make use of other indicators such as turnover and vacancy rates to further understand the magnitude of the worker shortfall so that appropriate recruitment and retention strategies can be

identified and tried. Turnover records job moves, including transfers. Vacancy rate is the extent to which an organization is unable to recruit staff to fill open positions (14).

### **Reported vacancy rates**

One third of all public health posts in South Africa unfilled, Zimbabwe: Out of the 1,530 established positions for medical doctors, only 687 are filled (vacancy rate of 55%) , Malawi: Vacancy rates of 36% for doctors in the public health service & Ghana: Vacancy rates reached 42% for public-sector physicians and 72.8% for Specialists (14). Increasing vacancy rates over time almost certainly reflect high turnover. For example, in Ghana, the vacancy rate for nurses doubled from 28% to 57% between 1998 and 2002. To address turnover it is essential to understand the factors associated with job Retention (15).

Selected source-country data sets are now providing insights into the cadre, age, sex, and years of experience of those who are leaving. In Malawi, the highest rates of resignation are found among medical officers (5.4%), lab technicians (5.1%) and clinical officers (3.6%) (16).

Data show a high dropout rate for female nurses in Zimbabwe with more than 15 years of experience. The majority of nurses who left South Africa in the mid 1990s were young, registered nurses in their early- to mid-twenties. Causes for worker shortage – weaknesses in the health system linked to training and education, recruitment and retention Human resources experts argue that shortages are a symptom of inadequate policies related to the availability of new entrants to the health workforce (the supply system) and to recruitment and retention of health workers (17).

Many research which were conducted in Sub African countries that were reported by world health organization have proved that shortage of health worker due to different reasons were emigration to abroad, local migration from urban to rural which creates uneven distribution and inadequate training with relation to population growth (18).

Salary outranked all other factors when health care professionals were asked what would make them remain in their home country. The majority in Cameroon (68%), Ghana (81%), South Africa (78%) and Uganda (84%) implied that an improvement in salary structures would be a good reason to stay. As many studies have shown that not only financial compensation but also unsatisfactory working conditions were the factors that can determine migration decisions of workers. For example, South African health professionals are more likely to cross borders than Ugandan professionals are, even though pay is lower in Uganda (19).

Turnover is often influenced by dissatisfaction with one or more attributes of the work environment: such as deteriorating living and working conditions, weak performance management, leadership and supervision structures, lack of recognition for good work, stress due to heavy workload, gender-related issues, including sexual harassment and gender-based discrimination, limited opportunities for career development and advancement, safety and security concerns, including those related to HIV/AIDS protection, care and risk, inadequate equipment and supplies are some of the factors (20).

The workforce crisis has no single cause. Public health care systems are not training and recruiting enough people. Then the pool of skilled workers is unevenly distributed, concentrations in urban areas and many working in the private sector rather than in public healthcare. Many resign due to the pressure of poor working conditions and low pay. Others migrate to better jobs abroad or with the private sector and nongovernmental organizations. Nevertheless, the leading cause of attrition is HIV itself. Health workers are not immune to infection and many become sick and die. WHO estimates that more than 4 million health workers are needed to meet the global shortfall (21).

African countries lose 20,000 skilled health workers per year, with up to 60% of doctors trained in some countries migrating within two years of graduation (22).

Research done in Uganda indicated that more than half (54%) of health workers planned to stay in their jobs indefinitely, and another 20% would stay at least three years. The rest reported that they were eager to leave their jobs soon, with 9% saying “as soon as possible.” Of those ready to leave soon, 11% would leave Uganda and 4% would leave the health sector. Older respondents (age 41 and up) were far less likely to indicate an intent to leave their jobs within two years, leave Uganda or leave the health profession. Private-sector workers were more likely to be in their first jobs (86%) compared to workers in the public sector (79%). Doctors, compared to the other cadres in our study, were the group most likely to say they are eager to leave their jobs within two years (57%), and they are most at risk for leaving Uganda or the health sector (46% said they would leave if they could). Regression analysis helped us determine that even after gender was accounted for, the status of being a doctor was highly predictive of a desire to leave their positions. Nurses were the cadre least likely to report an 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. For one point of reference, there is about a 20% turnover among nurses in the US Uganda Health Workforce Study (23).

Using an example from the health care industry, calculated that the cost of replacing 288 employees per year (in a hospital with 200 beds employing 1200 persons with a turnover rate of 2% per month)

was \$2,888,295.52 when all sources of costs were analyzed. Moreover, a recent Business Week (1998) study estimated that the replacement costs alone are over \$10,000 for about half of all jobs and approximately \$30,000 for all jobs. These estimates highlight the considerable costs that can be associated with turnover (24).

According to the World Health Organization (WHO), 31 countries in Africa do not meet the 'Health for All' standard of a minimum of one doctor per 5000 people. In the 1980s, for example, the doctor: population ratio was 1:10 800 in sub-Saharan Africa, compared to 1:1400 in all developing countries and 1:300 in industrialized countries. Worse still since the 1980s, the situation has deteriorated. In the 1990s the doctor: population ratio in Malawi, Mozambique and Tanzania was 1:30 000 or more and in Angola, Lesotho, Zambia and the Democratic Republic of Congo this ratio stood at 1:20 000. Although Africa has a better supply of nurses, it still lags behind other regions of the world. In the 1980s, for example, the nurse: population ratio in Africa was 1:2100, compared to 1:1700 persons in all developing countries and 1:170 in industrialized countries. Within Africa it there is a considerable variation in health personnel availability as There are nearly ten times as many doctors in South Africa as there are Conference on Brain Drain and Capacity Building in Africa, UN, Economic and Social Council 2000, Paragraph 6in Lesotho; and there are five times as many nurses in Botswana as there are in the Democratic Republic of the Congo (DRC) (25).

Ethiopia unequivocally training sufficient workers to replace those leaving the workforce However, even in the country where training is above replacement rates, it is not clear that will soon be in a position to meet current unmet needs or the increasing demands of an expanding population. Future direction boosting pre-service training is clearly important but is a longer-term solution because putting in place the infrastructure (human as well as physical) that is needed in this country will take a long time. Hence, a variety of complementary, shorter-term responses must be considered For instance, Aggressive retention policies, such as improving the remuneration and working conditions of health workers. The physician to population ratio was 1:48,000, the nurse to population ratio, 1:12,000. Overall, there were 20 trained health providers per 100,000 inhabitants. These ratios have since shown some improvement. Health care is disproportionately available in urban centers; in rural areas where the vast majority of the population resides (26).



## Conceptual frame work for the study

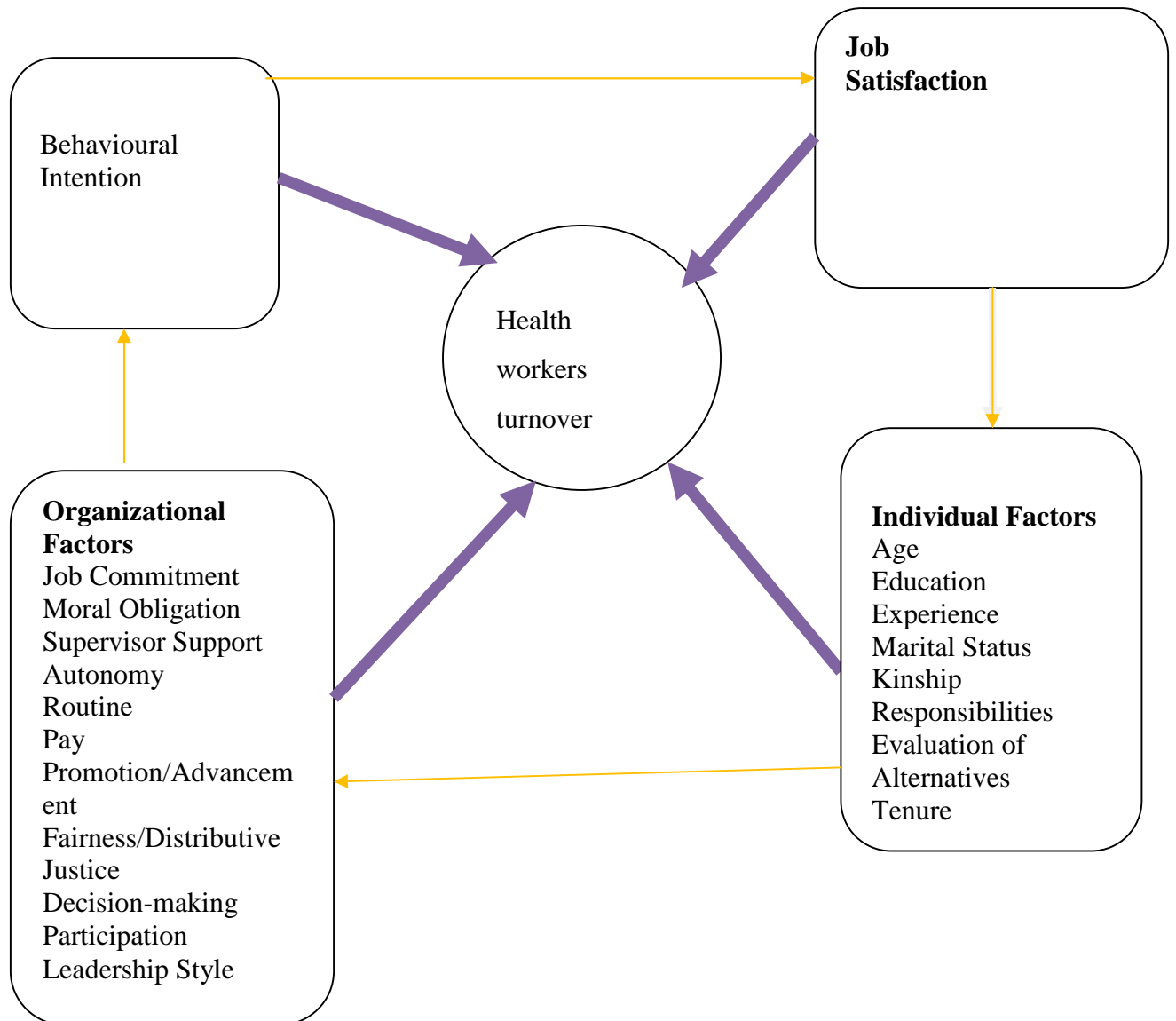


Figure 1: Conceptual framework for assessment of health worker turns over in West Amhara Region, Ethiopia 2012(21).

### **Chapter 3: Significance of the study**

When health worker turnover rate is high the health facilities intended objectives and expected results are not achieved. Therefore the study is significant in identifying the pattern & magnitude of health worker turn over in west Amhara region hospitals of Ethiopia to provide information based on the finding for those concerned Bodies of regional health bureaus officials, hospital governing board and senior management team to take appropriate measures. Uses the findings as base line to conduct additional study on what causes an employee to choose to leave an Organization.

Management can use the finding to curtail turnover and/or to manage the turnover more effectively, this will enable the creation of employee retention strategies and develop desirable Working environment.

The information gather in this study will assist in understanding the magnitude & pattern of health worker turnover among professional at the hospitals. When these are known, the concerning body will be in a good position to develop a staff retention strategy. So by implementing the strategy effectively will reduce turnover rate thus addressing most, if not all, the challenges associated with large number of staff turnover.

It is therefore important that staff turnover at the hospitals was investigated to identify the factors that contribute to this problem, and to identify strategies to rectify the situation. The results of this study can be used by: The regional health bureau uses this study for decision making to develop retention mechanisms, as base line survey to conduct further studied on this issues & the study hospital also used it to monitoring & evaluation of their human resources process to develop recruitment, retention, & human resource development plan as they are the main employer of health workers in public hospitals, and who is responsible to maintain adequate number of health workers for the health sectors in general.

## **Chapter 4: Objectives**

### **4.1 General objective**

To assess the magnitude health worker's turnover and associated factors among public hospitals in West Amhara region, Ethiopia

### **4.2 Specific objectives**

1. To describe the magnitude & pattern of health worker turn over
2. To assess factors associated with health worker turn over

### **Research questions**

What is the magnitude & pattern of health worker turnover in the hospitals?

What are the factors associated for health worker turn over in the hospitals?

## **Chapter 5: Methods and Materials**

### **5.1 study area & period**

The study was conducted in West Amhara region public hospitals in Ethiopia: The hospitals are available in North West Amhara : Namely Debretabor Zonal,Feleghiwt referral, Debremarkos referral, Shegawe Mota district, Fentselam district, Metema District and Debark district hospitals . Amhara regional state administratively divided into 11 zones with their own zonal health departments and 16 hospitals; four of the hospitals are referral hospitals, two zonal and ten district hospitals to provide health services for about 18 million people. The Amhara regional state covers 16% of the area of the country and about a quarter of the population, making it the second largest state in the country. Debretabor zonal, Debremarkos referral, Fenotselam district Debark & Metema were selected by using simple random sampling technique for the study.

The study was conducted from August 20, to June 2013 in five hospitals of Amhara region.

### **5.2 The study design**

Cross sectional retrospective study design was employed using method of a five-year retrospective review of documents of health workers who left the study hospitals & focus group discussion.

### **5.3. Populations**

#### **5.3.1 Source population**

Document of health worker who left Debretabor zonal, Debremarkos referral, Fenotselam, Debark & Metema district hospitals & senior management team members of the respective hospitals

#### **5.3.2 Study population**

Documents of health workers who left from hospitals during the period of 2007 to 2011, four case manager, laboratory ,pharmacy, nurse department heads & human resource supportive process owners were included in the study.

### **5.3.3 Inclusion criteria:**

Documents of health workers who left the five hospitals during the period of 2007 to 2011, eight selected senior management team member who served 2 years and above as a management team were included

### **5.3.4 Exclusion criteria**

Documents of health worker who left that did not contain all necessary information based on the check list were excluded

## **5.4 Sample size & sampling technique**

All documents of health workers' who left from the five studied public hospitals in the year 2007-2011 were reviewed & 8 members of senior management team were selected by considering their experience as they were assigned as department head based on their academic status & most of the time based on their experience and their best performance so involving them in FGD similar selection criteria of the hospital were used in addition to who serving in the hospital management team members at least 2 years and above . There are seven hospitals in West Amhara region among which the above five were selected using simple random sampling technique.

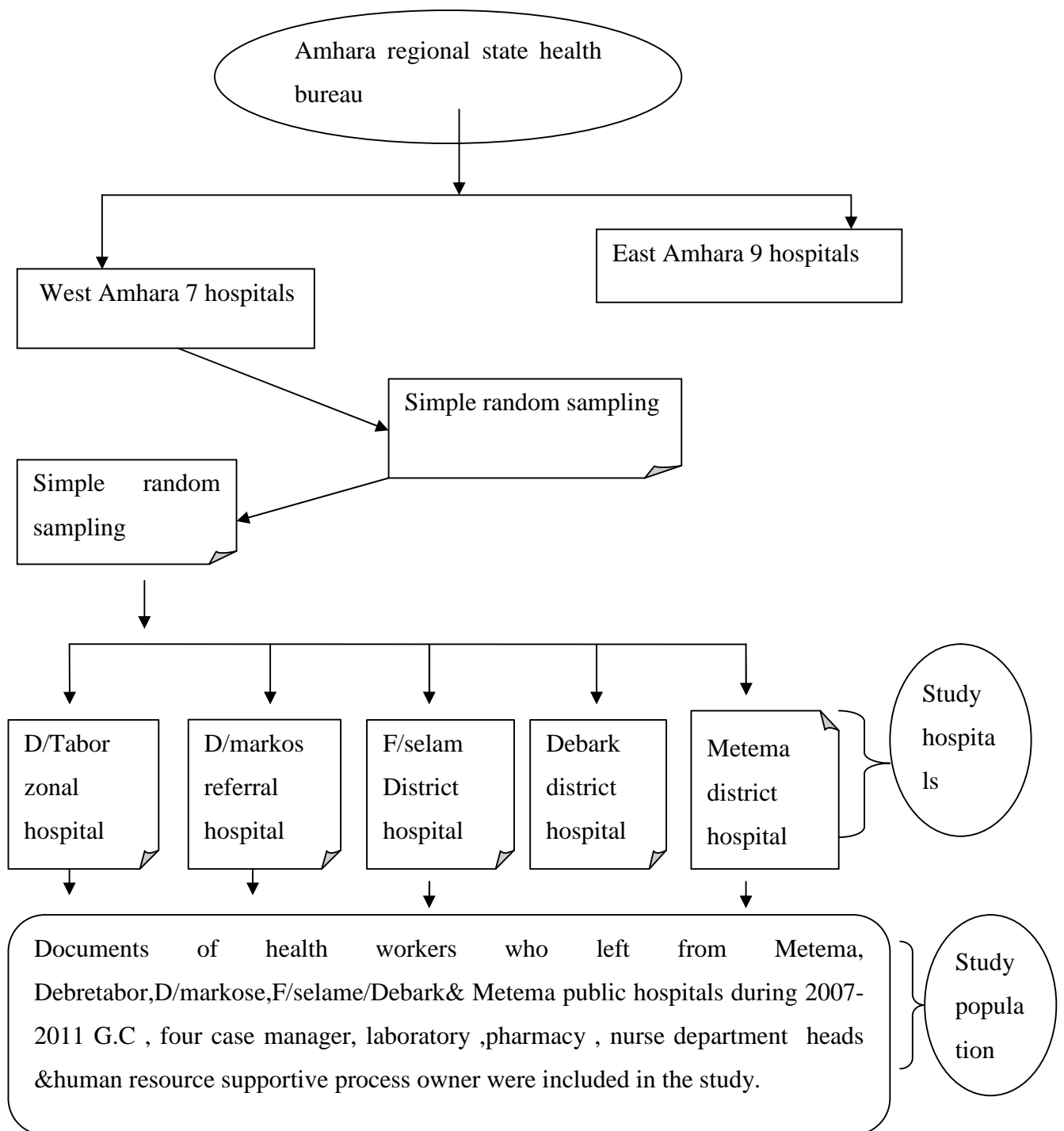


Figure 2: Diagram presentation of sampling procedure for the selection of study hospitals to conduct the assessment in five hospitals, in west Amhara region, Ethiopia, 2012

## **5.5 Data collection procedures & measurements**

### **5.5.1 Variables**

Dependent variable:

Health worker turn over

Independent variables

Socio-economical, (educational, experience, salaries) & demographic characteristics of the study population

### **5.5.2 Data collection instrument**

The instrument was developed by the principal investigator based on the specific objectives; checklist and questions for focus group discussion were developed by the investigator believing the check list and questions were helpful to collect the necessary data for the retrospective document review and qualitative analysis (21).

### **5.5.3 Data collection method**

Five-year health workers documents that left the hospitals were reviewed by using a checklist and 8 staffs from each hospital were participated in focus group discussion. A pilot study was done at Felegehiwot hospital to observe if the check list and focus group discussion question were applicable & relevant to address the research objective. The check list & focus group discussion questions were adjust & use as a data collection tools afterwards.

### **5.5.4 Data collectors' selection & training**

Data collectors were those who have completed at least grade 12/10, Supervisors were university graduate in first degree in any course of study & had similar experience in data collection & conducting FGD activities previously were given priority. After recruiting, the data collector & supervisors two days training was given for them by the principal investigator. One supervisor & one data collector were assigned for each hospital. The principal investigator coached both the supervisors & data collectors.

### **5.5.5. Data quality control measures**

The checklist & questions were translated to Amharic before data collection then again to English. Data quality was maintained by using trained supervisors & data collectors, on site supervision, crosschecking for completeness. Reminding remarks was given for the data collectors & supervisors by investigator how to minimize errors & corrective action was taken.

### **5.5.6. Data analysis & interpretation procedures**

The data was analyzed using descriptive statistics (tables), Bivariate and multivariate logistic regression, was carried out by using statistical package for social science (SPSS) for windows version 16. Focus group discussions (FGDs) were recorded by tape and transcribed after the data collection process. Then data were thematically summarized according to the type of response.

### **5.5.7. Dissemination plan**

The findings of the study will be submitted to Jimma University, college of public health & medical sciences. The results will be publicly presented at Jimma University & an effort will be made to disseminate using seminar, presentation in annual health worker review meeting, and providing the document to the study hospitals.

## **5.6. Operational definition**

**Turn over:** - Turnover records job moves, including transfer an individual health worker who is exiting from a permanent or temporary position. May be leaving because they are:

- Taking up employment in another health care organization
- Leaving the profession
- Terminating employment on statutory age requirements
- Taking up early retirement for occupational health reasons
- Taking early retirement
- Disciplinary reasons (dismissal) Job movement.

Push factors: - causing workers to move between sectors or cross borders



### **5.7. Limitation of the study**

The study reliance on records collected for purpose of other than health worker turn over assessment.

Documents may not be available and incomplete which are difficult to review, Focus group discussion relay on management committee members may give their perceive causes of health worker turn over.

### **5.8 Ethical considerations**

Ethical clearance letter was gotten from Jimma university ethical review and Approval board. Consent was received from D/markos, Fenotselam, metema, Debark& Debretabor hospitals. This study poses minimal risks to its individual's documents. Confidentially were maintained for reviewed documents, &was included no personal identifiers. After explaining the purpose, general content & confidentiality of the investigation, written consent was `obtained from each respective hospital prior to conduct review.

## Chapter 6: Results

### 6.1. Socio-economic and demographic characteristics

Among 885 health worker document reviewed, majority 590 (66.7%) respondents were aged between 21-30 years and 237(26.7%) of respondents of this aged group were leaving the hospitals while in the other age groups turnover was small in number. Over all 534(60.3%) of the respondents were males while the remaining 351 (39.7%) were female health workers with higher 197 (60.2%) males health workers turnover than 130 (39.8%) in the case of females. But when we compared the turnover of workers among similar sex, the percentage of the turn over showed very slight difference. For instance, among the total 534 male respondents turnover rate was 197 (36.9%) similarly, among the total 351 female respondents turnover rate was 130 (37%).

Regarding marital status, more than half of them 492(55.6%) were single while 389 (44%) were married and the remaining small proportion (0.4%) were divorced during the survey and single health workers turnover rate was highest 178(54.4%). Only lower proportion 4(1.2%) of health workers turnover was observed among the divorced health workers. According the document reviewed; 346 (39.1%) of the respondents were nurses, 10.5% were medical doctors, 5.8% were health officers, 10.4% were midwives, 10.5% were pharmacist, (13.1%) were lab technologist, (3.1%) were x-ray workers and 67(7.6% ) were included in the other groups. Higher 103(31.5) of the turnover was observed among nurses health workers. Concerning service duration of the leaver two thirds (66%) had three and above years work services while the smallest proportion (4.9%) of them had only less than six months work service. In addition, the results from the table also indicated that the highest turnover (47.2%) was observed on the workers whose experience had 3-5 years while the lowest turn over occurred on the workers whose work experience had less than six months. Until health workers experience reached greater than five years, turnover increases with work experience increases.

In terms of income level (salary), more than half of the leaver (53.1%) salary was between 1000-2000 Ethiopian Birr while the remaining 30.3% and 16.4% salary was between 2001-3000 and 3001-4000 respectively. Data extracted from leaver's document` indicated that possible reasons for leaving of health workers were: 93 (28.4%) for further education, 107 (32.7%) transferred to better place, 112 (34.3%) resignation for better payment in private health organization and NGO, 15 (4.6%) for retirement, death, disciplinary measures& due to health related problems Table 1 below.

Table 1: Socio-economic & demographic characteristics of the participants by workers turn over, West Amhara region from August 20 to June 2013

Variables		Workers turn over		
		No (Existing health workers)	Yes (leaver health workers)	Total
		Number (%)	Number (%)	Number (%)
Age	21-30	353(63.3)	237(72.5)	590(66.7)
	31-40	136(24.4)	84(25.7)	220(24.9)
	41-50	38(6.8)	4(1.2)	42(4.7)
	≥51	31(5.6)	2(0.6)	33(3.7)
Sex	Male	337(60.4)	197(60.2)	534(60.3)
	Female	221(39.6)	130(39.8)	351(39.7)
Marital status	Single	314(56.3)	178(54.4)	492(55.6)
	Married	244(43.7)	145(44.3)	389(44.0)
	Divorced	0(0)	4(1.2)	4(0.5)
Academic qualification	Medical Doctors	58(10.4)	35(10.7)	93(10.5)
	Health officers	27(4.8)	24(7.3)	51(5.8)
	Nurses	243(43.5)	103(31.5)	346(39.1)
	Midwives	41(7.3)	51(15.6)	92(10.4)
	Pharmacists	56(10.0)	37(11.3)	93(10.5)
	Lab technologist	58(10.4)	58(17.7)	116(13.1)
	X-ray tech.	18(3.2)	9(2.8)	27(3.1)
	Others	57(10.2)	10(3.1)	67(7.6)

Service duration	Less than 6 months	38(6.8)	5(1.5)	43(4.9)
	6-12 months	56(10.0)	19(5.8)	75(8.5)
	1-2 years	72(12.9)	111(33.9)	183(20.7)
	3-5 years	127(22.8)	154(47.1)	281(31.8)
	>5 years	265(47.5)	38(11.6)	303(34.2)
Salary level	1000-2000	295(52.9)	175(53.5)	470(53.1)
	2001-3000	166(29.7)	102(31.2)	268(30.3)
	3001-4000	96(17.2)	49(15.0)	145(16.4)
	>4000	1(0.2)	1(0.3)	2(0.2)
Main reason for turn over	Still working	558(100)		558(63.1)
	Further education	0(0)	93(28.4)	
	Transferred to better areas	0(0)	107(32.7)	93(10.5)
	Resignation for better payment	0(0)	112(34.3)	107(12.1)
	Discipline measures and other reason	0(0)	15(4.6)	112(12.7)

## 6.2 Results of the Focus Group Discussion

### 6.2.1 Factors That Made health worker Stay & leave in public hospitals.

Why do some health workers leave the job in public hospital? A) Lack of Incentives factors contributing for Health workers were leaving government hospitals in west Amhara hospitals because of lack of incentives. It was noted that the hospital management was not providing incentives to its staff as most of them pointed out that: no adequate payment, transport pick them during working hour), there are no privileges as compared to other private health facilities in the region, poor housing conditions or no housing at all, B) Low Salaries: “public health services pays its workers less than any other private & NGOs health sector that hires similarly qualified people for similar jobs, C) High Caseloads: High caseloads often drive good employees from their positions because of the stress and frustration that results from not being able to do the job as it should be done.

What makes health workers stay in public hospital? A) Because of job security and good career path, B) Because of social relationship *‘there is good interrelationship, leadership and support during bereavement and there is not much segregation’*, C) considering as a profession to deploy their professional & national obligation about helping the sick and the health workers indicated that they stay in public health facilities because they love the profession, D) Working Environment focus group discussion participants from district hospital also stated that the physical environment is conducive for someone to stay in the district.

What makes health worker stay in private health facilities as compared to public health facilities in west Amhara hospitals? A) Providing incentives and improving communication and transport could motivate them to stay in private health facilities, B) Improving on leadership skills & decrease work load, additional benefit on top of salary could motivate them to stay in.

When health workers leave the job in public hospitals, where do they go?

When they were thought of health care professionals said lack of advancement opportunities was the biggest problem in their workplaces, their Salary is always an important employment issue, and said their organization’s poor culture was a major challenge. Other top challenges selected were work overload. So they will search for better payment & and working environment in private health facilities and government health facilities (from rural to urban).

What can be done to retain health workers in public hospitals? The majority indicated improving working conditions (increasing salary, increasing allowances, improving accommodation, water, electricity, communication, leadership skills and transport).

### **6.2.1 .Summary Of Major Findings From Focus Group Discussion**

Major findings from focus group discussion were: Health worker stayed in public hospitals because of social relationship, physical environment, professionalism and considering as a profession to deploy their professional & national obligation about helping the sick and the health workers indicated that they stay in public health facilities because they love the profession. Health workers left government health facilities in hospitals in west Amhara because of lack of incentives, poor leadership and poor transport and communication network. Factors that could help to retain health workers in the hospitals included increasing salary providing incentives and resources at all levels, improving working conditions (education, housing, water, electricity, communication and transport, rotations) in health facilities and improving on leadership skills.

### **6.3. Univariate associations of health workers turnover**

The relationship between socio economic and demographic characteristics, such as age, sex, academic qualification, service duration, and salary level of workers were examined by chi-square test. In the univariate analysis, except sex of the respondents and salary all other variables were significantly associated with health workers turnover at  $P < 0.05$ , Table2 below.

Table 2: Association between socio-economic, demographic variables and health workers turnover, West Amhara region from August 20, to June 2013

Variables		Workers turn over			
		No (Existing health workers)	Yes (leaver health workers)	X <sup>2</sup>	P - value
		Number (%)	Number (%)		
Age	21-30	353 (59.8)	237 (40.2)	29.85	<0.001
	31-40	136 (61.8)	84(38.2)		
	41-50	38 (90.5)	4(9.5)		
	≥51	31 (93.9)	2(0.2)		
Sex	Male	337(63.1)	197(36.9)	0.002	0.965
	Female	221(63.0)	130(37.0)		
Marital status	Single	314(63.8)	178(36.2)	6.97	0.031
	Married	244(62.7)	145(37.3)		
	Divorced	0(0)	4(100.0)		
Academic qualification	Medical Doctors	58(62.4)	35(37.6)	46.31	<0.001
	Health officers	27(52.9)	24(47.1)		
	Nurses	243(70.2)	103(29.8)		
	Midwives	41(44.6)	51(55.4)		
	Pharmacists	56(60.2)	37(39.8)		
	Lab technologist	58(50.0)	58(50.0)		
	X-ray tech.	18(66.7)	9(33.3)		
	Others	57(85.1)	10(14.9)		

Service duration	Less than 6 months	38(88.4)	5(11.6)	1.763	<0.001
	6-12 months	56(74.7)	19(25.3)		
	1-2 years	72(39.3)	111(60.7)		
	3-5 years	127(45.2)	154(54.8)		
	>5 years	265(87.5)	38(12.5)		
Salary level	1000-2000	295(62.8)	175(37.2)	0.924	0.820
	2001-3000	166(61.9)	102(38.1)		
	3001-4000	96(66.2)	49(33.8)		
	>4000	1(50.0)	1(50.0)		
Main reason for turn over	Still working	558(100)	0(0)	8.85	<0.001
	Further education	0(0)	93(100.0)		
	Transferred to better areas	0(0)	107(100.0)		
	Resignation for better payment	0(0)	112(100.0)		
	Discipline measures and other reason	0(0)	15(100.0)		



#### **6.4. Multivariate associations with health workers turnover**

Age, marital status, and service duration were remained independently and significantly associated with health workers turnover in multivariate analysis; whereas academic qualification was lost its significance.

Health workers leaving the hospitals were more likely to be younger than leaver health workers. For example, those between aged 51 years and over were 0.514 less likely to leave the hospitals compared those aged between 21-30 years. Significant and independent association was observed between marital status and health workers turnover; divorced health workers were 1.23 times more likely to leave the hospitals compared to those who were single; whereas married health workers were 1.71 times more likely to leave the hospitals compared to those who were single. Service duration ; 6-12 months, 1-2 years, and 3-5 years were significantly associated health workers turnover, (AOR =3.938with 95% CI: 1.908 - 8.127), (AOR =14.567with 95% CI: 8.333 - 25.463), and (AOR =10.345with 95% CI: 6.298 -16.993) respectively, table 3 .

Table 3: Multivariate associations with health workers turnover, West Amhara region from August 20, to June 2013

Variables		AOR(95%CI) <sup>€</sup>	p-value
Age	21-30	1.00	0.038
	31-40	1.585(1.025 - 2.450)	0.554
	41-50	0.701(0.216 - 2.275)	0.392
	≥51	0.514(0.112 - 2.360)	0.038
Marital status	Single	1.00	
	Married	1.706(1.191 - 2.443)	0.004
	Divorced	1.23(1.11 – 2.342)	0.003
Academic qualification	Medical Doctors	1.00	
	Health officers	1.875(0.826 - 4.256)	0.133
	Nurses	0.826(0.468 - 1.456)	0.508
	Midwives	1.460(0.754 - 2.827)	0.262
	Pharmacists	0.748(0.382 1.464- )	0.397
	Lab technologist	1.717(0.895 -3.295 )	0.104
	X-ray tech.	0.827(0.289 - 2.364)	0.723
	Others	0.464(0.196 -1.102 )	0.082
Service duration	Less than 6 months	1.918(0.622 - 5.910)	0.257
	6-12 months	3.938(1.908 - 8.127)	<0.001
	1-2 years	14.567(8.333 - 25.463)	<0.001
	3-5 years	10.345(6.298 -16.993 )	<0.001
	>5 years	1.00	

1

Abbreviation: AOR= Adjusted Odds Ratio  
 €, Adjusted for all variables in the model

## Chapter 7: Discussion

The aims of the study was to assess the magnitude and pattern and factor affecting health worker's turnover among public hospitals in West Amhara region, Ethiopia

Among 885 health worker document reviewed higher proportion (72.5%) of the study subjects were between 21-30 age healths workers turnover mainly occurs in the younger age groups. This is comparable to the report of a study done in Ireland (21). Among the total 885 respondent health workers, 492(55.6%) were singles while the other 389 (44%) were married and the remaining small proportion (0.4%) divorced (table 1). This finding compatible the study done in Ireland 66% were single and 28% married (21). The findings suggest that turnover rates were higher in the first year of service, and among staff the shortest length of service. These findings correlate somewhat with Irish study showed that staff who left the service were aged between 21 and 29 year (21).

Among 885 health worker significant and independent association was observed between the independent factors (age, marital status, service duration) and the outcome variables (health worker turnover) in multivariate analysis.

Health workers leaving the hospitals were more likely to be younger than leaver health workers. For example, those between aged 51 years and over were 0.514 less likely to leave the hospitals compared those aged between 21-30 years. This finding was compatible with the study done by (16, 17, 35, 37) in which the age of the respondents is significant determinant factor of turnover.

In terms of sex, the majority of the respondents (60.3%) were male while the remaining (39.7%) were female. As the study result indicated that male health workers turnover were higher (60.2%) when we compared female health workers turnover (39.8%). But both in the univariate and multivariate analyses, the respondents' sex was not significant determinant factor of health workers turnover at ( $P < 0.05$ ). Therefore, it is reasonable to say that the sex of the respondents were not determinant factor of health workers turnover. This finding was compatible with the study done in South Africa (36) which showed sex of the respondents was not determinant factor of workers turn over another research done in Zimbabwe contrary for this finding (17).

In multivariate analysis, significant and independent association was observed between marital status and health workers turnover; divorced health workers were 1.23 times more likely to leave the hospitals compared to those who were single; whereas married health workers were 1.71 times more likely to leave the hospitals compared to those who were single. This finding was comparable with the finding of other studies (35, 37) in which the marital status of the respondents is significant determinant factor of workers turnover.

The result of the univariate analysis indicated that there was highly significant difference between academic qualification of the respondents and workers turnover at ( $p < 0.001$ ). However, in the multivariate analysis academic qualification was not significantly associated with health workers turnover. This finding was compatible with the study done by (36) in which the academic qualification of the respondents was not significantly associated with health workers turnover.

Among the total sampled respondents, two thirds (66%) had three and above years work services while the smallest proportion (4.9%) of them had only less than six months work service. In multivariate analysis, service duration was independently and significantly associated with workers turn over. This finding is contrary to other studies conducted by (36).

In terms of income level (salary), from the total sampled respondents more than half of the respondents (53.1%) salary was between 1000-2000 Ethiopian Birr while the remaining 30.3% and 16.4% salary was between 2001-3000 and 3001-4000 respectively. In both univariate and multivariate analyses, there was no statistically significant association observed between income and workers turn over. This finding is contrary to other studies conducted in different areas of the world. Repeatedly, researchers have identified the significant impact of salary on workers turnover in different studies done by different researchers (19, 29) which showed salary was found to be significant determinant factor for turnover.

## **CHAPTER 8: Conclusion and Recommendations**

### **8.1 Conclusion**

This research indicates that the rate of turnover in health workers continues to be a significant problem across hospital services in the West Amhara region. The results indicated that in relation to the demographic characteristics: age, gender, marital status, academic qualifications & employment service duration health worker serving the hospitals had their own impacts on health workers turnover.

The present study indicated that age of health workers leaving the hospitals were largest in number 237 (72.5%) of the respondents ages between 21-30 years while in the other age groups turnover was relatively lowest in number. Age, marital status, service duration were significantly and independently associated with health worker turnover.

### **8.2 Recommendations**

There are many policy issues that the government of Ethiopia in general and the Amhara region and respective hospitals in particular need to consider if it wants to reduce the turnover rate of health workers. Therefore, based on the findings obtained from this study, the following recommendations are forwarded:

The turnover rate of younger health workers who have found between 21-30 years was highest (72.5%) in the study area. Therefore, the respective hospitals human resources department has to make it a point that a young new comer is oriented during the early stages of employment so as to encourage socialization among other employees. The early stages of employment are most critical because these are the stages where most employees feel that they are neglected and alone. Therefore, the results of this study suggest that interventions should be carried out to increase levels of their job satisfaction. Since job satisfaction has a strong correlation with workers turnover, it is crucial to reinforce relevant human resources polices and improving working conditions.

Among many reasons, the major three reasons for leaving hospitals in the study area were: for better payment in private health organization and NGOs (34.3%), for transferred to better place (32.7%), and for further studies in their respective profession (28.4). Therefore, the survey has assured that

health worker turn over aggravated by both financial and non-financial benefits. Therefore, the respective hospitals management, regional health bureau & hospital governing board should look into these factors separately in order to attract and retain health workers in the hospitals and at different levels.

Finally, the researcher strongly recommended that the government of the country and the region in general and the respective hospitals in particular: Provide non-monetary incentives, supplying more equipment and resources, improve on transport and communication, provide additional incentive, provide training and promotions, and teach professionalism so that health workers do not refuse working in public hospitals and that they are prepared to promise working in public health facilities.

The result from both qualitative and quantitative data relating to reasons for turnover/ leaving was that lack of retention mechanism so that significant numbers may have been retained if retention strategies were formulated to promoting professional development, managerial support, or improved professional practice environment & providing both financial & non financial incentives had been introduced

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## **Annex (1): Informed consent**

To \_\_\_\_\_ Referral/Zonal/ district Hospital

Dear Sir,

### **REQUEST TO USE \_\_\_\_\_ HOSPITAL AS A RESEARCH SITE**

I am a last year student at Jimma University, College of Public Health and Medical Sciences ,Department of Health planning and Health Sciences Management, for partial Fulfillment of the Requirement for the Degree of Master of Science in Hospital and Health Care Administration. I intend to conduct a research project as part of the course requirement. The title of the study is “Assessment of health worker turns over in west Amhara public hospitals.”I would like to request your permission to utilize all the documents of health worker who left the hospital and management team member in your hospital. A document review using check list and focus group discussions will be used to collect data. There are no risks involved in the study and the results would help to design strategies retain health workers in the hospital and come up with recommendations for retention of health worker in the hospitals.

With Best Regards

Engdasew G/hanna

## **Annex (2): Check list & questions**

Assessment of Health worker turns over in west Amhara public hospitals.

To /Debretabor/ D/Markos/F/selam/ Debark& Metema hospital, my name is

\_\_\_\_\_

I am data collector in your hospital using this document review checklist

The following document review checklist & questions are focuses on assessment health worker turn over in west Amhara public hospitals to assess the pattern and magnitude of health worker turnover. The contents are socioeconomically, demographic and questions to which gather information from health worker personal document & you may respond.

Note;- that these will be completely confidential and anonymous. This will be only used for part of a thesis written in partial fulfillment of a Master Degree in health care & hospital administration (MHA) to the benefit of west Amhar public hospitals..

Thank you



Table 5: Number of health worker employed & left the employment from 2007-2011

Hospital

name/code \_\_\_\_\_

	2007	2008	2009	2010	2011
1. Total number of Health Worker EMPLOYED					
2 . Number of health worker who left employment					

## **Annex (3): QUESTION GUIDE FOR FOCUS GROUP DISCUSSION**

Seating (around)

Introductions

Brief introduction of the survey

Focus Group Discussion (No right or wrong answers. Disagree is okay)

Confidentiality

Tape record (because can't remember by heart)

Take notes (in case tape breaks down)

### **Guides:**

- Why do some health workers leave the job in public hospital?
- What makes health workers stay in public hospital?
- What makes health worker stay in private clinics as compared to public services in west Amhara hospitals.
- When health workers leave the job in public hospitals, where do they go?
- What can be done to retain health workers in public hospitals?

Summarise points raised

Thank participants

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4. 1990 年 10 月 1 日，某公司因经营不善，宣告破产。根据《破产法》的规定，下列哪些财产属于该公司的破产财产？

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ASSURANCE OF PRINCIPLE INVESTIGATION

The under signed agree to accept responsibility for the scientific ethical and technical conduct of the research project and for provision of required progress reports as per terms and conditions of the research publications office in effect at the time of Grant is forwarded as the result of the application.

Name of the student Engdasew G/Hanna

Date\_\_\_\_\_

Approval of the first advisor

Name of the firs advisor\_\_\_\_\_

Date\_\_\_\_\_ signature \_\_\_\_\_