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HEALTH PROFESSIONALS INTENTION TO LEAVE THE ORGANIZATION AND ASSOCIATED FACTORS IN PUBLIC HEALTH FCILITIES OF PASTORALIST AREA; FAFAN ZONE, EASTERN ETHIOPIA

MPH THESIS

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Health Professionals Intention to Leave The Organization and Associated Factors in Public Health Facilities in pastoralist Area; Fafan Zone, Eastern Ethiopia

A Thesis Submitted to the Collage of Health Science, School Of Graduate Studies, Haramaya University

In Partial Fulfilment of the Requirements for the Degree of Master of Public Health in Health Service Management

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APPROVAL SHEET

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I hereby certify that I have read and evaluated this thesis entitled " Health Professionals Intention to Leave and Associated Factors in Public Health Facilities in Fafan Zone, Eastern Ethiopia" prepared under my guidance by Hikmet Abdurahman. I recommend that it should be submitted as fulfilling the thesis requirement.

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As a member of the Board of Examiners of the MPH Thesis-Open Defence Examination, I certify that I have read and evaluated the thesis prepared by Hikmet Abdurahman and examined the candidate. I recommend that the thesis be accepted as fulfilling the thesis requirements for the degree of Master of Public Health in Health Service Management.

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Final approval and acceptance of the thesis are contingent upon submitting its final copy to the Council of Graduate Studies (CGS) through the Candidate's Department or School Graduate Committee (DGC or SGC).

STATEMENT OF THE AUTHOR

By my signature below, I declare and affirm that this thesis is my work. I have followed all ethical and technical principles of scholarship in the preparation, data collection, data analysis, and compilation of this thesis. Any scholarly matter that is included in the thesis has been given recognition through citation.

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ABBREVIATIONS

AOR:	Adjusted Odds Ratio
CI:	Confidence Interval
EHSTP:	Ethiopian Health Sector Transformation Plan
FDREMOH:	Federal Democratic Republic of Ethiopia Minister of Health
HRM:	Human Resource Management
IHRERC:	Institutional Health Research Ethics Review Committee
OR:	Odd Ratio
RHWs:	Rural Health Workers
USAID:	United States Agency for International Development
USD:	United State Dollar
VIF:	Variance inflation factor
WHO:	World Health Organization

ABSTRACT

Background: Health professionals' intention to leave significantly affects the functioning of the health care sector worldwide, especially in developing countries, and it impedes progress towards different health-related goals by reducing innovation, affecting the quality of services and the motivation of health professionals. In Ethiopia from studies done on intention to leave the rganization, only few studies focus on all health professionals and all types of health facilities. Also there is no study done on intention to leave in pastoralist area in Ethiopia.

Objective: To assess magnitude of health professionals intention to leave the organization and associated factors in public health facilities pastoralist area; Fafan Zone, Eastern Ethiopia from September 1 to 30, 2020

Methods: Institution based cross-sectional study was conducted in 14 public health facilities (1 hospital and 13 health centers) in Fafan Zone. Multi-stage stratified sampling was used to select 587 health professionals included in the study. The data were collected by using self-administered structured and pre-tested questionnaires. Standard questionnaire was used to assess intention to leave of health professionals. EpiData Version 3.1 was used for data entry and STATA version 16 was used for analysis. Bivariable and multivariable logistic regression analyses were used to identify associated factors of intention to leave. All statistical tests are declared significant at P-value <0.05 and adjusted odds ratio with 95% CI was reported. Model fitness by Hosmer-lemeshow with the value of >0.05 fitted for the model (4.97) and multi-collinarity test was carried out by using Variance inflation factor (VIF=1.42).

Result: Overall, 58.7% of the health professionals reported to have intention to leave. Younger (20-30) age group (AOR=2.84, 95% CI: 1.73- 4.67), not satisfied with their job (AOR= 1.86, 95% CI: 1.18 – 2.93), poor affective commitment (AOR= 3.69, 95% CI: 2.33-5.83), poor continuance commitment (AOR=3.65, 95% CI: 2.32- 5.75) and poor work environment (AOR= 2.61, 95% CI: 1.63 - 4.18) were factors that are positively associated with intention to leave.

Conclusion: Health professional's intention to leave public health institutions was 58.7%. Younger age, not satisfied with job, poor affective commitment, poor continuance commitment and poor work environment were the factors that influence intention to leave.

Key Words: Intention to leave, Health professionals, Public health facility, Fafan Zone

1. INTRODUCTION

1.1. Background

Intention to leave is an employee's plan to leave or quit his/her current job or company and look forward to finding another job in the near future, and it is an immediate antecedent of turnover decisions (Price and Mueller, 1981). Turnover refers to the act of individuals actually leaving an organization whereas intention to leave is individuals' perceptions towards leaving (Kalifa et al., 2016, Wen et al., 2018). Moreover, because intention to leave relate to turnover behavior, understanding intention to leave among current employees might help to identify ways to decrease intention to leave and, thus, actual turnovers(Wen et al., 2018). Health professionals' intention to leave significantly affects the functioning of the health care sector worldwide, especially in developing countries, and it impedes progress towards different health-related goals by reducing innovation, affecting the quality of services and the motivation of health professionals (Blaauw et al., 2013, Bonenberger et al., 2014).

In developing countries human resource shortage are not only due to production of health professionals but also because of employee turnover and instability at health facilities (Stilwell et al., 2003).

Ethiopia is one of fifty-seven countries listed by the World Health Organization (WHO) as having a health workforce crisis. The World Health Report 2006, which for the first time, was devoted to Human Resources for Health, estimated that Ethiopia had a density of 0.247 doctors, nurses and midwives per 1,000 population against the calculated threshold of 2.28/1,000 that was utilized to categorize a crisis (WHO, 2006). In 2017, that density has improved slightly and currently stands at 0.74 per 1,000 populations. Despite the progress, the country still needs to increase its investment in health workforce development and management to achieve sustained development goals and universal health coverage (Jhpiego, 2018).

Fafan zone is one largest zone of Ethiopia Somali region. Somali Region is one of Ethiopia's four Developing Regional States (DRS) and the second largest region in Ethiopia in terms of land mass with population of over 6 million people, predominantly pastoralists (85%), with most people living in hard to reach/remote areas that face developmental inequities (Federal Ministry of Health of Ethiopia (FDREMoH, 2010). 40.4% of the woredas in Somali regions have at least 80% of the population living more than 5 km from the nearest health facility (Oladeji et al., 2021).

Even though Ethiopia has made great efforts in recent years to improve major health problem of the country with the implementation of the country's health-sector transformation plan and

other strategic initiatives that have driven a steady decline in mortality and morbidity among population (FDREMoH, 2010). The Ethiopia Somali region has shown less improvement in key health outcomes compared to the national average; the 2019 Mini Demographic Health Survey (DHS) reports that the region has the lowest percentage of fully vaccinated children, with only 18.2% of children having received all basic vaccinations and 48.8% of children had received no vaccinations at all compared to national average of 43.1% and 19.2%, respectively also other health indicators (EPHI and ICF, 2019).

Health human resource shortage, maldistribution, inadequate performance management and productivity, implementation of motivation and retention mechanism is lowest in pastoralist areas than elsewhere. It was noted that health centers in urban areas are over staffed while rural health centers are extremely under staffed (FDREMoH, 2018). However, the way health workers are trained, deployed, managed and supported is central to the quality of health services that they are able to deliver(Jhpiego, 2018).

With this background, the study will be designed to assess health professionals intention to leave the organization and associated factors in public health facilities of pastoralist area; Fafan zone, Somali Region and through that make recommendations to improve the effectiveness of interventions.

1.2. Statement of the problem

Intention to leave is a serious issue, especially in the field of human resource management for health worldwide (Wubetie et al., 2020). Study in the world showed that magnitude of intention to leave their current health facilities is 42.3% in China(Wen et al., 2018), 30.5% in Korea (Oh and Kim, 2019). The study in Africa shows 18.8% of health workers in Tanzania, 26.5% in Malawi and 41.4% in South Africa intend to leave their current organization (Blaauw et al., 2013). In Ethiopia studies showed that the magnitude of intention to lieave is 67.8% in North Gondre zone(Worku et al., 2019), 63.7% in Jimma Zone (Kalifa et al., 2016), 61.3% in North Shoa Zone (Ferede et al., 2018), 65.5% in Amhara region (Dellie et al., 2019) and 52.5% in Gonder (Abera et al., 2014) .

A variety of predictors influencing the intention to leave of health professionals have been identified. Study in China and Korea shows that location, gender, age, job title, level of education, type of facility, length of current employment, usual number of hours worked per week or work pressure and job satisfaction are factors that affect health workers intention to leave (Oh and Kim, 2019, Wen et al., 2018, Gan et al., 2018). Studies in Ethiopia also shows that age, sex, living out of family, opportunity of other job, performance appraisal system, and affective commitment and job satisfaction are factors that affect health workers intention to leave current organization (Worku et al., 2019, Ferede et al., 2018).

Health professionals' intention to leave significantly affects the functioning of the health care sector worldwide, especially in developing countries, and it impedes progress towards different health-related goals (Blaauw et al., 2013, Bonenberger et al., 2014). It affects the health facilities capacity to achieve objectives by reducing innovation, affecting the quality of services and the motivation of health professionals. Besides, it is very costly for health facilities because recruiting, selecting, hiring, and training new employees is expensive (Cho and Lewis, 2011, Bonenberger et al., 2014). According to the report on job-hopping by the Task Force, over two-thirds of the organizations indicated that they had suffered a loss of productivity greater than 10%, as a result of high employee turnover (Anne Guerry , 2016). Apart from low level of productivity, the survey reported poor quality of products and services because of the high turnover and high cost of recruitment (Rizwan et al., 2014).

Shortage of trained health workers, uneven distribution of health workers between urban and rural areas, under production of high and mid-levels of trained personnel, and low retention, including "brain drain" of health workers to more developed countries, are characteristics of human resources for health crisis in Ethiopia (Girma et al., 2007).

The World Health Organization 2010 developed Global Policy Recommendations "Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention" is a notable milestone in rural health policy (Rourke, 2010).

The Government of Ethiopia has developed different human resource policies and strategies to reduce human resource for health crisis, For example, in the past decade, the Government of Ethiopia has invested heavily in health systems strengthening, including ambitious supply-side workforce development efforts to dramatically increase numbers of health workers resulting in significant gains in improving the health status of Ethiopians (Jhpiego, 2018). Improve Development and Management of Human Resource for Health (HRH) is one of performance measures and strategic initiatives of 2015 Ethiopian Health Sector Transformation Plan (2015 EHSTP) (FDREMoH, 2015).

Although, the government of Ethiopia have taken different measures, the studies done in Ethiopia showed high level of intention to leave. This is because the way health workers are trained, deployed, managed and supported is central to the quality of health services that they are able to deliver. There is also a growing recognition in many countries, including Ethiopia, that health systems at all levels, will not be successful in their efforts to keep populations healthy, reduce maternal and child mortality rates or end deaths from Acute Immune Deficiency Syndrome (AIDS), malaria or tuberculosis (TB), without strengthening the planning, management, retention, performance and productivity of the health workforce (Jhpiego, 2018).

Many studies on intention to leave have been conducted to examine the intention to leave and the factors relating to intention to leave worldwide. Many researchers have attempted to answer the questions of what really determines the employees' intention to leave by investigating possible antecedents of the employees' intention to leave. However Studies done in Ethiopia showed that only few studies focus on all health professionals and all types of health facilities, the majority of study focus on specific professionals and health facilities. Also there is no study done on intention to leave in pastoralist area in Ethiopia. So, this study was planned to be conducted on intention to leave among health professionals of public health facilities in Fafan Zone, Somali Region Ethiopia.

1.3. Significance of the study

Studying intention of health professionals to leave their health facilities will give information on factors that affect health professionals' intention to leave and provide evidence to strengthen- planning, management, retention, performance and productivity of the health workforce.

The finding and recommendation will also contribute to program managers as well as local Non-Government Organizations (NGOs), Fafan Zone health department and Somali regional health bureau in designing strategies to improve human resource for health management including different retention strategies. Also it is used as baseline data for other studies that will be conducted in the area and similar studies conducted in other area or regions and will be added to the existing literatures.

1.4 Objectives of study

1.4.1. General Objective

To assess the magnitude of health professionals intention to leave and associated factors in public health facilities in Fafan Zone, Eastern Ethiopia from September 1 to 30, 2020

1.4.2. Specific Objective

- To assess the magnitude of intention to leave among health professionals
- To identify factors associated with intention to leave among health professionals

2. LITRATURE REVIEW

2.1 Intention to leave the organization

Intention to leave is defined as an health professionals plan or desire to leave the current organization and look onwards to find another job in the near future (Weisberg, 1994) . There are many factors that influenced employee to have intention to leave public health facilities. Among these factors socio demographic factors, job satisfaction, work environment, work pressure, performance appraisal system and Organizational commitment are actually characteristics that would lead individuals to stay or leave the organization (Ferede et al., 2018, Oh and Kim, 2019).

2.2 The magnitude of intention to leave

Different studies showed that the magnitude of health professionals' intention to leave is high even though it is different in different countries. A national cross sectional survey conducted in Korea showed that out of 2719 about 30.5% of medical doctors intended to leave within two years (Oh and Kim, 2019). Similar study conducted in the same country showed that 42.3% of primary doctors intended to leave (Wen et al., 2018). Also another study conducted in China among psychiatric nurses showed that out of 7933 respondents 20.2% of them intend to leave their current job (Jiang et al., 2019). A cross-sectional study conducted among Nurses working in hospitals in Jordan revealed that 59 % of them reported to have intention to leave(Abu Raddaha et al., 2012).

A cross sectional survey conducted in three district of Eastern Region of Ghana showed that magnitude of intention to leave among health workers were 69% (Bonenberger et al., 2014). Similar survey conducted in three African countries Tanzania, Malawi, and South Africa showed that the magnitude of intention to leave their current job among health workers were 18.8% (95% CI: 15.6-22.2), 26.5% (95% CI: 23.7-29.5) and 41.4% (95% CI: 37.3-45.1) respectively (Blaauw et al., 2013).

In Ethiopia different studies have reported the magnitude of intention to leave is high. A national wide cross sectional survey among nurses of public health facilities reveals that out of 424 participant 50.2% of them have intention to leave their current job (Ayalew et al., 2015). Similarly a nationally representative, cross-sectional survey conducted among anesthetists working in public-sector hospitals showed that out of 251participant almost half (n = 120; 47.8%) of anesthetists planned to leave their jobs in the next year (Kols et al., 2018).

A cross sectional study conducted on intention to leave in Amhara Region in Ethiopia showed that 52.5% of health professionals in Gondar referral hospital (Abera et al., 2014), 65.5% of professionals in Amhara national regional state public hospitals (Dellie et al., 2019) and 61.3% health professionals in North Shoa Zone (Ferede et al., 2018) had intention to leave their job. Another similar study conducted on intention to leave among health professionals in Public-Private Mix Partnership Health Facilities in Addis Ababa, capital city of Ethiopia revealed that almost half of them, (46%) want to leave their current job(Dado et al., 2019). Also the study conducted in Jmma, Southwest Ethiopia among Health Professionals of Public Health Centers showed that out of 455 health professionals that were participated in the study 290 (63.7%) had intention to leave (Kalifa et al., 2016).

2.3 Associated factors with intention to leave the organization

2.3.1. Socio demographic factors

Age

In different studies age is found to be most determinant factor for intention to leave among health professionals. National cross-sectional survey conducted in Ethiopia showed that those Anesthetics whose age >30 were 0.95 times less likely to had intention to leave than those whose age were =<30 (adjusted OR = 0.95, 95% CI: 0.92-0.99)(Kols et al., 2018). Similarly a cross-sectional study conducted in North Gondar Zone, Northwest Ethiopia among health workers working at primary hospitals showed that those participants whose age from 20-29 years were 3.96 times (AOR: 3.96; 95%CI: 1.04, 15.07) more likely intended to leave their current working organization than those health workers whose age greater than 40 years. It also reported that younger health workers have fewer family ties and may leave a job to further their education or career (Worku et al., 2019).

Gender

Different studies showed that gender is a significant predictor of intention to leave. A cross sectional study conducted in Jordan among nurses revealed that gender was significantly associated with nurses' intention to leave ($p<0.05$), male nurses were more likely to have intention to leave than female nurses (AOR=1.47, p =0.043) (Al Momani, 2017). A national wide cross sectional study among psychiatric nurses in China shows male nurses were more likely to have intention to leave than female nurses (AOR=1.879; 95%CI: 1.605 to 2.199)(Jiang et al., 2019). Similarly a study conducted in Ethiopia, Jimma Zone showed that males were nearly 2 times (AOR =1.6, 95%CI: 1.0-2.5) more likely to have intention to leave than females (Gesesew et al., 2016). Another study conducted among health professionals in public health institutions of North Shoa zone, Amhara region, Ethiopia also showed that

males were 1.5 times (AOR=1.496, 95%CI:1.016-2.204) more likely to have intention to leave than those who were females (Ferede et al., 2018).

Marital status

The study in Ethiopia, Sidama Zone showed that marital status was significantly associated with intention to leave, those who are single are 2.6 times more likely to have intention to leave the organization compared to those who are married (AOR: 2.56, 95% CI: 1.27–5.13), ($P < 0.05$) (Asegid et al., 2014). Another study in Ethiopia showed that professionals who were unmarried was 2.46 times (AOR: 2.46, 95% CI:1.32–4.58) more likely to have intentions to leave than those who were married (Dellie et al., 2019).

Educational level

As shown in different study educational level can affect intention to leave. A study conducted among health professionals in University of Gondar referral hospital, Northwest Ethiopia revealed that that educational level was statistically significant predictors for intention to leave. That is health professionals who had degree and above were 2.72 times (AOR=2.72, 95% CI: 1.192 - 6.19) more likely to have intention to leave than those who had diploma. Also reported this the finding might be due to the fact that when the level of education increases they will have more opportunities to get better jobs outside the organization than those having lower education level (Abera et al., 2014). The study in Gambella Region, Southwest Ethiopia revealed that those health professionals whose educational level were first and second degree had 2.08 times (AOR = 2.82, 95% CI: 1.69 - 4.69) more likely to have intention to leave from the public health facilities compared to diploma and certificate holders. Also reported that health professionals with higher educational qualification (first and/or second degree holders) had better job opportunity (Woldegiorgis et al., 2015).

Profession

A study conducted among health professionals in University of Gondar referral hospital, Northwest Ethiopia revealed that profession were significantly associated with intention to leave, that is Nurses were 7.67 times (AOR= 7.67, 95%CI: 2.913, 20.188) more likely to have intention to leave than Medical Doctors and Laboratory professionals were 9.15 times (AOR 9.15, 95% CI: 2.925, 28.63) more likely to have intention to leave than Medical Doctors and other health professionals were 5.32 times (AOR=5.32, 95% CI: 2.147, 13.162) more likely to have intention to leave than its counterparts. Also reported that the finding might be due to the fact that the Ethiopian government has formulated different strategies to increase physicians' retention like house provision and/or allowance, more duty payment than other professionals, other benefits and they have good opportunities to work part time outside

the hospital (Abera et al., 2014). Study conducted among health professionals in public health institutions of North Shoa zone, Amhara region, Ethiopia showed that those health professionals who are medical doctor were 0.318 time (AOR=0.318,95%CI:0.122-0.824) less likely to have intent to leave than other health professionals (Ferede et al., 2018)

2.3.2. Organizational related factors

Types of health facility

Several studies showed that types of health facility significantly associated with intention to leave. The study in Ethiopia revealed that nurses working in hospital were 2.49 times (AOR: 2.19, 95% CI: 1.12 - 4.30, $P < 0.05$) more likely to have intention to leave their work than those who were working in the health center (Asegid et al., 2014). Another study also revealed that Anesthetists at referral hospitals were half as likely to intend to leave the job as compared to those working at district hospitals (AOR = 0.48, 95% CI 0.23 - 0.98) (Kols et al., 2018).

Location of health facility

The study conducted in East Gojjam, Amhara Region, Ethiopia in 2013 indicated that rural nurse had 2.1 times (AOR=2.099, 95% CI:1.215 - 3.627) more intent to leave their current health care institution as compared to urban nurses (Getie et al., 2015).

Professional development / career development opportunity

A cross-sectional survey conducted in Libanese among nurses working in hospitals revealed that those who do not got career development were 1.93 times (AOR = 1.93, 95% CI:1.30–2.87) more likely to have intention to leave than those who got carrier development (El-Jardali et al., 2010). A nationally representative, cross-sectional study among anaesthetics working in public-sector hospitals in Ethiopia showed that those who got low professional development opportunity were 1.91 times more likely to have intention to leave (AOR = 1.91, 95% CI 1.26, 2.90) than their counterparts (Kols et al., 2018). Study conducted among Ethiopian nurses revealed that those who had limited opportunity for professional development were 1.398 times (AOR= 1.398,95%CI:1.056-1.85,p<0.02) more likely intend to leave their job than those who had good opportunity for professional development (Ayalew et al., 2015). Similar study study conducted in Ethiopia showed that those who got Low training opportunity were 2.586 times (AOR=2.586, 95%C.I., 1.54- 4.35, P.0.000) more likely intend to leave than their counterparts (Getie et al., 2015). Those who dissatisfaction with the provision of educational opportunities were 3.59 times (AOR: 3.59, 95% CI 1.61–7.99) to have intention to leave than their counterparts (Dellie et al., 2019).

Current position

A cross-sectional study conducted among nurses randomly selected from public referral hospitals showed that Nursing role was one of the significant factors of intention to leave, that is nurses who had a nurse manager or head nurse role were 0.54 times (OR=0.54, p=0.037) less likely to have intention to leave than normal staff nurses(Al Momani, 2017). A cross-sectional study conducted in Gambella Region, Southwest Ethiopia among health Professionals' showed that respondents who were not involved in decision making had 2.44 times more likely intention to leave from the public facilities compared to those who participated in decision making (AOR = 2.58, 95% CI: 1.12, 5.92)(Woldegiorgis et al., 2015).

Recognition

An institutional cross-sectional study conducted in North Gondar Zone, Northwest Ethiopia among health professionals working at Primary Hospitals showed that health professionals who were unsatisfied with their performance appraisal were 2.97 times (AOR2.97;95%1.64, 5.36) more likely intended to leave their current organization as compared to those participants who are satisfied with their performance appraisal(Worku et al., 2019). Similar study conducted among laboratory professionals working at Amhara National Regional State public hospitals, Ethiopia showed that professionals who have not got recognition were 2.69 (AOR: 2.69, 95% CI 1.35–5.38) times more likely to have intention to leave as compared to those who have got recognition (Dellie et al., 2019).

Professional supervision

Study conducted among health professionals in public health institutions of North Shoa zone,Amhara region, Ethiopia showed that those that were unsatisfied with the supervision were 1.916 times (AOR = 1.916, 95%CI:1.274,2.881) more likely intend to leave than their counter parts(Ferede et al., 2018)**.**

Organizational Commitment

Organizational commitment is said to be an important variable in the discussion of intention to leave since different studies showed that more committed employees would be less likely to leave an organization or it is less likely that he or she will leave for another job or organization. The study conducted among health professionals in Ghana showed that those who have organizational commitment were 0.36 times (AOR = 0.36, 95% CI: 0.19 to 0.66) less likely to have intention to leave than their counterparts(Bonenberger et al., 2014).

A study in East Gojjam, Amhara Region, Ethiopia revealed that organizational commitment was found to significantly association with nurses' intention to leave (AOR=1.742, P-0.026, 95% C.I. 1.07-2.84) that means those who have low organizational commitment were 1.742 times mor likely to have intention to leave than those who have high organizational commitment (Getie et al., 2015). The study conducted among health professionals in primary hospitals of North Gondar Zone, Northwest Ethiopia showed that health professionals who have low affective commitment were 3.12times (AOR=3.12,95%CI:1.64-5.92) more likely intend to leave their current organization as compared to those who have high affective commitment(Worku et al., 2019). Another Cross sectional study conducted among laboratory professionals working in Amhara National Regional State public hospitals, Ethiopia also showed that those who have low affective commitment were 2 times (AOR=2.05, 95%CI: 1.10–3.82) to have intention to leave than those who have high affective commitment(Dellie et al., 2019).

Study conducted among health professionals in public health institutions of North Shoa zone, Amhara region, Ethiopia showed that those health professionals who have low normative commitment were 2.176 times(AOR=2.176, 95%CI:1.482-3.196) more likely to have intention to leave than health professionals who have high normative commitment (Ferede et al., 2018).

Work Environment

A cross-sectional survey conducted in Lebanon showed that participation, control and career `development are key work environment factors that contribute to turnover intention. It highlighted that for every 1 point score decrease on career development there was a 93% increase in the likelihood of reporting an intent to leave (OR = 1.93, 95% CI = 1.30–2.87). Likewise, for every 1 point score decrease on nurse Participation there was an observed 53% increase in the likelihood of reporting intent to leave the hospital respectively (OR = 1.53, 95% CI = 1.14–2.06) (El-Jardali et al., 2010). A study conducted in Japan revealed that work environment were important determinants for the intention to leave among newly graduate nurses (Tominaga and Miki, 2011). Another study conducted in Israel concluded that intent to leave was predicted by poor communication (Davidson et al., 1997).

A cross sectional study in USA showed that work environment had significant effect on intention to leave. That is all subscales measuring nurse practitioner practice environment had similar influence on intention to leave. With every unit increase in each standardized subscale score, the odds of intention to leave decreased about 20%. For example, nurse practitioners

from organizations with higher mean scores on the Nurse Practitioners Administration Relations (NP-AR) subscale had lower intent to leave their current position (OR= 0.79, 95% CI [0.70, 0.90]) (Poghosyan et al., 2017). Among hospital nurses who worked in Tehran, Iran work environment (OR = 0.414; CI:0.227–0.856) inappropriate work environment(Sokhanvar et al., 2018). Study conducted among laboratory professionals working at Amhara National Regional State public hospitals, Ethiopia showed that professionals who have poor working environments were 2.77 times (AOR: 2.77, 95% CI 1.45–3.30) more likely to have intention to leave their organizations than their counter parts(Dellie et al., 2019).

2.3.3. Work - related factors

Work experience

Different studies revealed that work experience has significant association with intention to leave. Study in Korea showed that the likelihood of intending to leave decreased as length of current employment increased ($p < 0.000$), and intention to leave were highest among those with five or less years of employment at the current job (33.8%). That is those who have 1-5 years work experience were 1.27 times (AOR= 1.269, 95% CI: 0.961-1.674) more likely to have intention to leave than those who have 6-10 years' work experience (Oh and Kim, 2019). Study conducted in Jordan revealed that nurses who had more than 15 years of work experience were 0.74 times (AOR=0.74, p =0.053) less likely to have intention to leave than those who had 15 years or less also reported that more experienced nurses had invested more of themselves in the organization, making leaving impractical for them. Nurses with fewer years of experience were more likely to disclose intent to leave their positions (Al Momani, 2017). A study in Northwest Ethiopia revealed that health professionals who have work experience of 2.1 to 5 years were 1.94 (AOR=1.94, 95% CI: 1.142-3.288) times more likely to have intention to leave than health professionals with work experience of less than two years. Also reported that this finding might be due to the fact that if professionals get experienced, they will have more work opportunities; because work experience is one of the main criteria to hire workers in almost all organizations in Ethiopia (Abera et al., 2014). Another study in Ethiopia revealed that intention to leave the job decreased by 5% with each additional year of service (AOR=0.948, 95% CI=0.914, 0.982; p<0.01) (Ayalew et al., 2015).

Income or Pay

A study in china revealed that income was significant predictor of the rural health workers (RHWs') intention to leave. Those who received an income of $326.8–$490.1 per month were 1.26 times (AOR=1.26, 95% CI: 1.02 - 1.55, P = 0.032) more likely to have intention to

leave than those who received ≥ 490.2 USD per month(Liu et al., 2019). Another study conducted in the same country revealed that monthly income level is inversely associated with intention to leave, that is those nurses who receive higher monthly income were 0.5 times (AOR = 0.521, 95% CI: 0.399-0.680) less likely intend to leave as compared to those who have low income(Jiang et al., 2019). The study conducted among Nurses Working at Governmental Health Care Institutions in East Gojjam, Amhara Region, Ethiopia showed that nurses who got lower salary were 2.067times (AOR=2.067, 95%C.I. 1.215-3.517, P. 0.007) more likely intend to leave than those who got higher salary (Getie et al., 2015). Another similar study conducted in Governmental Hospitals in Addis Ababa, Ethiopia revealed that Nurses who had monthly income less than 3145 Ethiopian Birr were 6.05 times (AOR=6.05, 95% CI: 1.056-34.641) more likely to have intention to leave than those who had monthly income more than 4725 Ethiopian Birr (Wubetie et al., 2020).

Job Satisfaction

Several studies reported that job satisfaction was one of the most important predictor of intention to leave. The study conducted among pharmacists working in different healthcare settings in Saudi Arabia showed that job satisfaction was one of the most important predictors of pharmacists' intentions to leave, that is those who were satisfied with their job were 0.9 times (AOR=0.923; 95% CI: 0.899 - 0.947; $p < 0.001$) less likely to have intention to leave than those who were dissatisfied(Al-Muallem and Al-Surimi, 2019). A study in United States among public health practitioners showed that those who were somewhat or very satisfied with their job were 0.37(AOR=0.37; 95% CI=0.33) times less likely to have intention to leave(Leider et al., 2016). A study in China showed that nurses who were satisfied with one's job were 0.37 times (OR = 0.373, 95% CI = 0.308-0.452) less likely to have intention to leave than their counterparts (Jiang et al., 2019). Another study conducted in Ghana concluded that job satisfaction significantly associated with turnover intention those who have higher level of job satisfaction have 0.74 times (AOR=0.74, 95% CI: 0.57 to 0.96) less likely to have intention to leave than their counterparts health workers (Bonenberger et al., 2014).

The study conducted in Jimma Zone Ethiopia showed that health professionals with below mean score of institutional satisfaction were 1.7 times (AOR =1.7, 95%CI: 1.06-2.7) more likely to have intention to leave than their counterparts and also health workers with below mean score of organizational satisfaction were 1.8 times (AOR=1.8, 95%CI: 1.08-2.8) more likely to have intention to leave than those with above mean score (Gesesew et al., 2016). The study conducted among Nurses Working at Governmental Health Care Institutions in

East Gojjam, Amhara Region, Ethiopia showed that nurses that are unsatisfied with their job were 1.774 times (AOR=1.774, 95%C.I. 1.06-2.97, P. 0.029) more likely to have intention to leave their job as compared to those who were satisfied(Getie et al., 2015).

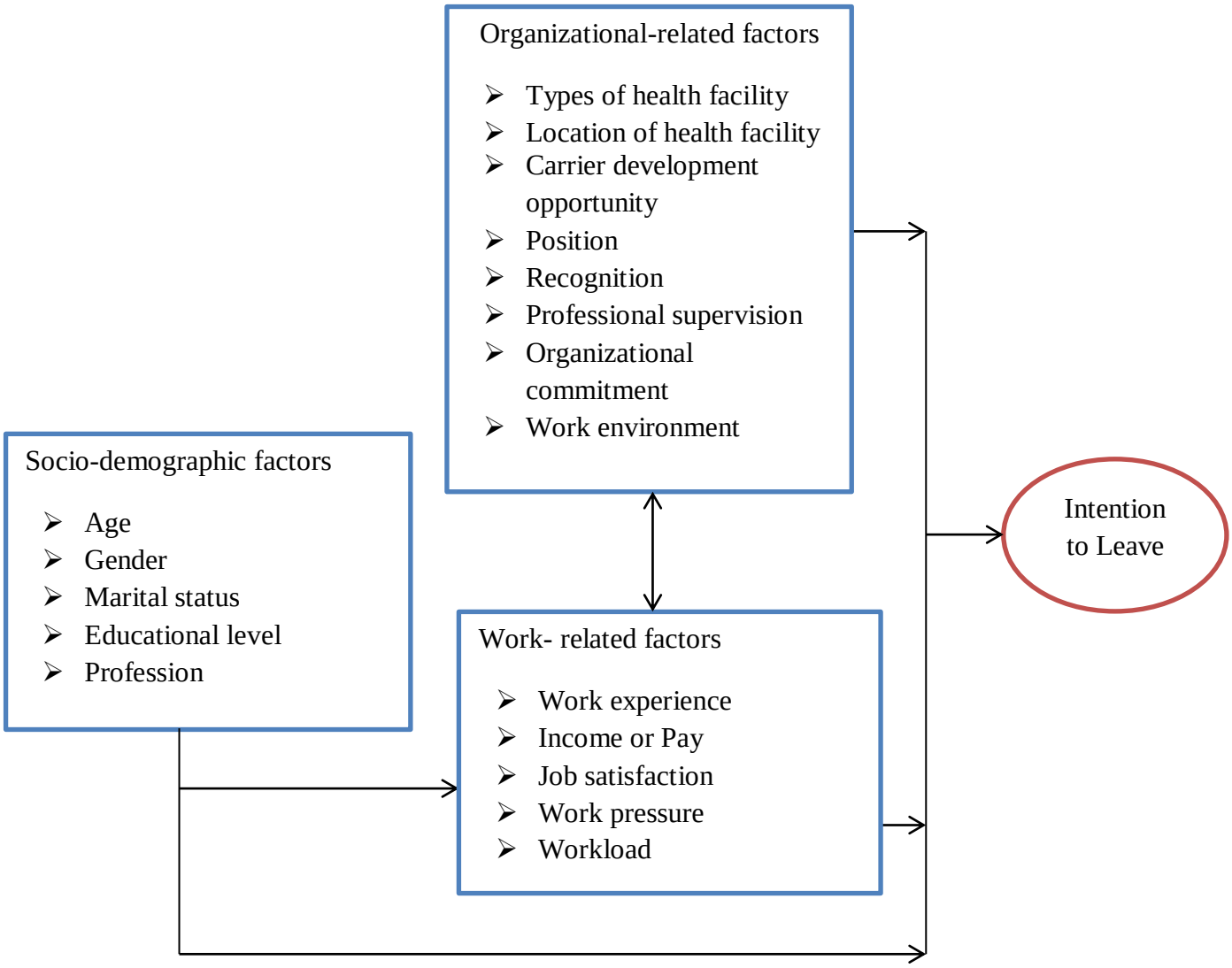
Workload

A nationwide cross-sectional study conducted in china showed that nurses who were working more than 40 hours per week was 1.6 times (AOR=1.584, CI: 1.374 to 1.825, P <0.001) more likely to have intention to leave as compared to those who were 40 hours and below (Jiang et al., 2019). Study conducted in Iraq showed that doctors working more than 40 hours per week were 2.3 times (AOR=2.28, 95%CI: 1.27–4.06) more likely to have intention to leave than those working 40 hours and below (Jadoo et al., 2015).

Work pressure

Several study showed that work pressure is one of the important predictor of intention to leave. A cross-sectional study conducted in Jordan showed that nurse to bed ratio due to shortage of nurses or work pressure was the most leading reason that influence their intention to leave (Al Momani, 2017). study conducted among laboratory professionals working at Amhara National Regional State public hospitals, Ethiopia showed that professionals who had work pressure were 1.95 times (AOR: 1.95, 95% CI: 1.06–3.57) more likely to have intention to leave their organizations than their counter parts(Dellie et al., 2019). The study in Jimma, Ethiopia showed that as work pressure of health professionals' increases, intention to leave of the health professionals will also be increased (Hailu et al., 2016).

2.3 Conceptual framework



Source: developed by reviewing different literatures of intention to leave

Figure 1 Conceptual framework of health professionals intention to leave and associated factors in public health fcilities in Fafan zone, Eastern Ethiopia, 2020

3. METHODS AND MATERIALS

3.1 Study area/ setting and study period

The study was conducted from September 1 to 30, 2020 in Public health facilities found in Fafan Zone of Somali Regional State (SRS), East Ethiopia. Fafan Zone is one of the biggest & densely populated zone among the eleven zone of SRS. The zone is bordered by Nogob Zone on south, Oromia region on west, Siti & Somalia and Jarar Zone east. According to 2012 E.C Zonal report the Zone has a total population of 1,314,718. This zone has 11 Woredas, 3 City council & 237 Kebeles. Regarding health facilities the Zone has 29 Health centers and 2 hospitals-(1 Referral and 1 General) with a total of 1511 health professionals.

The study was conducted in selected woredas health centers and Hospital. Sultan Sheik Hassan Yeberre Hospital was the selected hospital which was inaugurated in January 2017 in remembrance of Ethiopian former Prime Minister Meles Zenawi. This hospital is also a referral teaching hospital which is under Jigjiga University. Totally it has 1262 staff out of which 573 are health professionals. Totally 13 health center were included in the study of which one from Jigjiga city and 2 from Shabaley, 3 from Babili, 3 from Gursum, 3 from Kebribeyah and 1 from Harorys woreda. 281 health professionals were found in 13 health centers.

3.2. Study design

A health facility based cross - sectional study was implemented to assess intention to leave and associated factors among health professionals in public health facilities of Fafan zone.

3.3. Source population

The source population of the study was all health professionals working in health facilities of Fafan Zone.

3.4. Study population

The population of the study was health professionals working in selected health facilities of Fafan Zone.

3.5. Inclusion and exclusion criteria

3.5.1. Inclusion criteria

All Health Professionals who are permanently employed and found on their regular working time during the study period in all departments of public health facilities in Fafan Zone.

Those who have work experience more than six month was included.

3.5.2 Exclusion criteria

The health professionals who are on leave and would not return during the study period were excluded.

3.6. Sample size determination

Sample size was calculated using single population proportion formula. An estimate of 63.7% of intention to leave among health professionals of Jimma Zone, Oromia Regional public health centers, Ethiopia (Kalifa et al., 2016) was used. 95 % confidence level with margin of error 5 % (d = 0.05) and non-response of 10 % was considered.

Applying the formula

$$n = \frac{(z_{\alpha/2})^2 p(1-P)}{d^2} = \frac{(1.96)^2 X\ 0.637(1-0.637)}{(0.05)^2} = 355$$

Non response rate = 10% X 355 = 36= 36

n = (355+ 36)*1.5= 587

So, the overall sample size was 587

Where, n= the minimum sample size,

$z_{\alpha/2}$= the desired level of confidence interval 95% (1.96).

P= 63.7% magnitude of intention to leave (Kalifa et al., 2016),

d= margin of error 5% (0.05).

3.7. Sampling procedure/ technique

A multi-stage stratified sampling technique was used to select representative sample of health professionals in the selected health facilities. In the study area, there are thirty one public health institutions and 1511 health professionals. First the district stratified in to City council (3) and woredas (11) and then from city council Jigjiga city was selected by simple random sampling using lottery method and then one Hospital selected from the two hospitals and from 2 HCs one HC selected, Sultan Sheik Hassan Yeberre Hospital (SSHYH) and Ayerdega HC respectively. From 11 woredas 5 woredas (Shabaley, Babili, Gursum, Kebribeyah and Harorys) was selected by simple random sampling and all health centers found in the woreda was included, 12 health centers. There are 826 health professionals in these health facilities (1 hospital and 13 HCs). The total sample size was proportionally allocated for each health facilities. The list of health professionals from each health facility was taken and then by using simple random sampling using a lottery method study participants were selected from each health facilities.

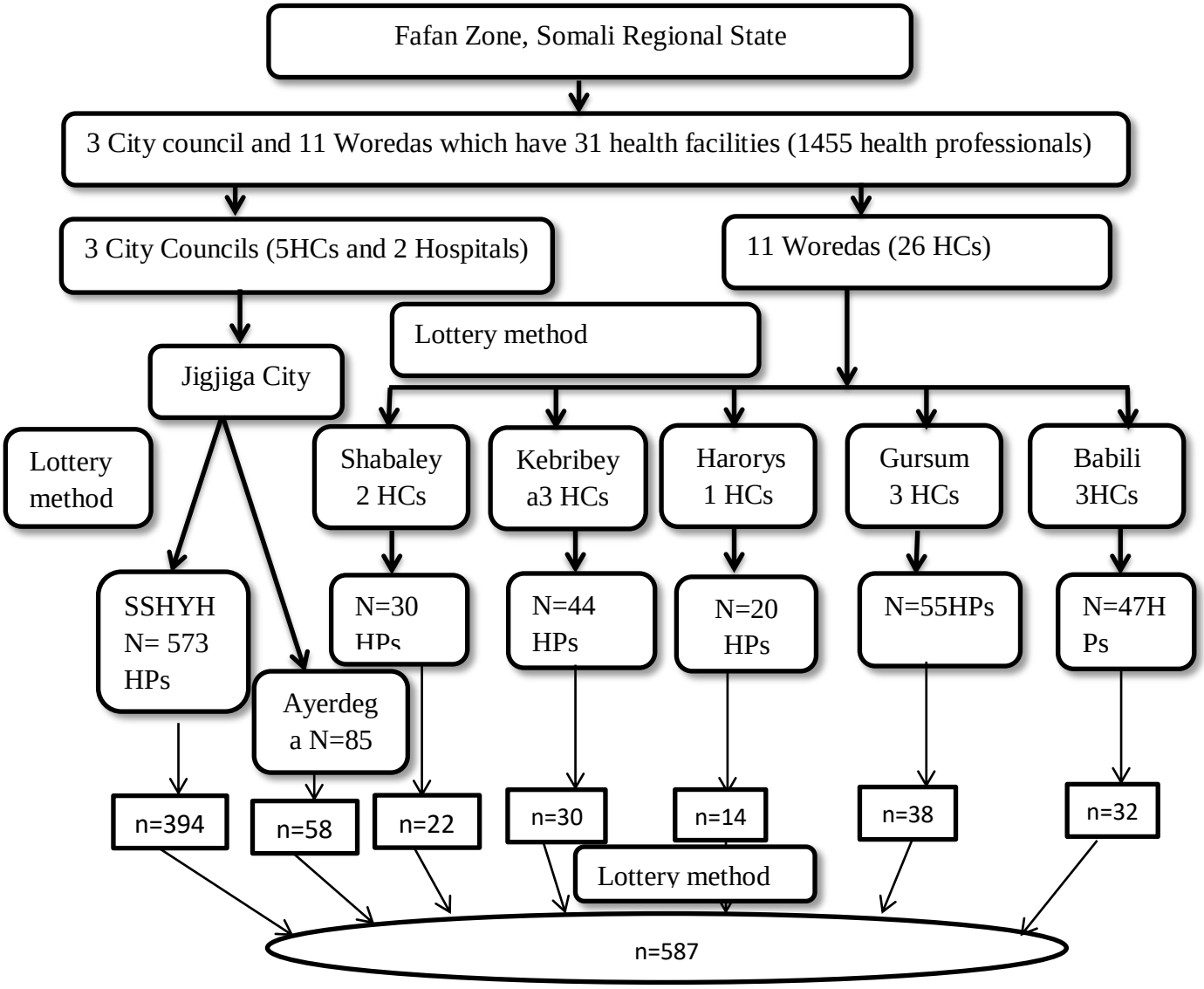


Figure 2 Sampling Procedure of health professionals intention to leave and associated factors in public health facilities in Fafan zone, Eastern Ethiopia, 2020

Note: SSHYH: Sultan Sheik Hassan Yeberre Hospital, HPs: Health Professionals and HC: Healt centers

3.8. Data collection tool and methods

Data was collected by self-administered structured and pre-tested questionnaires. Standard questions were adopted and adapted after reviewing relevant literatures and similar studies and it was prepared in English language. Data collection was facilitated by trained ten diploma holder data collectors and two BSC holder supervisors in the selected health facilities.

The questioner had three parts: Part 1- Socio-demographic characteristics of the respondents, Part 2- Factors related to intention to leave and Part 3- Intention to leave
Organizational related independent factors like Position, Recognition, Carrier development & Professional supervision was measured through dichotomous response (yes or no).

Income was measured by asking three questions. Items were (1): Current monthly salary; (2): Average duty payment per month & (3): Average other payment per month and after summing it up quantile was used to categorize the income. Workload was measured by asking their average working hour per week and taken from reference (Oh and Kim, 2019).

Job satisfaction was measured by the Minnesota Satisfaction Questionnaire (MSQ). The survey items consisted from total 20 items. Response ranged by 5-point Likert Scaling from 1= "strong disagre" to 5= "strongly agree". Sum of all item responses measures general job satisfaction. Minimum score is 20 and the maximum score is 100. Higher score indicated higher job satisfaction. The value above the median was labelled as those satisfied otherwise not satisfied. Internal Consistency – The alphas was 0.877.
Work pressure was measured by scale taken and modified from (Kalifa et al., 2016) which have 5 items with 5 point likert scale. Two items (item 2 & 4) were negatively phrased and had to be reverse-coded for analysis. Overall scores for each items was added up and those scored above the mean values was labelled having low work pressure otherwise have high work pressure.
The organizational commitment was measured by the revised scale of TCM (Three-Component Model Employee Commitment Survey) developed by Meyer, Allen and Smith (1993) (Meyer et al., 1993) which have 18 items and 6 items under each three subscale known as affective (item 1-6), continuance (item 7-12) and normative (item 13-18) commitment which were captured on 5-point Likert scale (1= strongly disagree to 5 = strongly agree). Several items were negatively phrased and had to be reverse-coded for analysis (Item 3, 4, 5 & 13). The over all score of each subscale were added and those above

median of each subscale classified as having good affective commitment, continuance commitment & normative commitment otherwise poor. The internal consistency reliability (Cronbach's alpha) for this scale in this study is 0.81.

Working Environment was measured using Working Environment Scale-10 taken from (Røssberg et al., 2004) which have 10 items under 4 subscale named self-realization, workload, nervousness & conflict. The self-realization subscale comprised four items (items 1, 2, 5 and 6). This subscale measures to what extent the staff members feel supported, whether they achieve more confidence and whether they experience being able to use their knowledge working on the ward. The workload subscale comprised two items (items 9 and 10). Conflict subscale comprised two items 7&8 and nervousness subscale also comprised two items 3&4. But the workload subscale was removed because workload was measured by working hour per week and work environment was measured with 8 items which have 5 point likert scale. Several items were negatively phrased and had to be reverse-coded for analysis (Item 3, 4, 7 & 8). The overall scores for each category were added up and those scored above the mean was labelled as good work environment otherwise poor work environment. Cronbach's alpha for this scale were 0.64

Health professional's intention to leave was the main outcome variable and computed by three-item measure of intention to leave scale adopted from (Yamazakia and Petchdee, 2015). The items were: (1) As soon as I can find a better job, I will leave the organization; (2) I am actively looking for a job outside the organization; and (3) I am seriously thinking of quitting my job. The measure was designed as a 5-point Likert scale. Response ranged by 5-point Likert Scaling from 1= "Strongly disagree" to 5= "Strongly agree". Minimum score is 3 and the maximum score is 15. Higher score indicated higher intention to quit from a job, that is those score above the mean labelled as intend to leave otherwise not intend to leave. The internal consistency coefficients for intention to quit from the organization were 0.811.

3.9. Variables

3.9.1 Dependent variable

- Intention to leave

3.9.2 Independent variables

The independent variables of the study are:

- Socio-demographic characteristics:

Gender, Age, Marital status, Profession, Educational level,

- Organizational and work- related factors

Types of health facility, location of health facilities, Current position, Recognition, Carrier development, Professional supervision, Organizational commitment: affective, continuance and normative commitment and Work environment

- work- related factors

Work experience, Income or Pay, Job satisfaction, workload/ working hour per week & Work pressure

3.10. Operational definition(s)

- ✓ **Intention to leave**: is defined as an health professionals plan or desire to leave the current job and look onwards to find another job in the near future (Weisberg, 1994) . It was measured by measure of intention to leave scale which is composed of three items with 5 point likert scale and the overall scores for each items was added up and those scored above the mean values was labelled have intention to leave, otherwise, classified as do not have intention to leave (Yamazakia and Petchdee, 2015).
- ✓ **Job satisfaction**: The state of health professionals being satisfied by their job or it is positive or pleasurable emotional state resulting from the appraisal of one's job or job experience (Helena and Teresa 2012).
  Overall satisfaction of health professionals was measured by 20 items and the overall scores for each items was added up and those scored above the mean values was labelled as having job satisfaction, otherwise, it was classified as not satisfied (Weiss et al., 1967)
- ✓ **Work environment**: described the quality of the working environment, both its physical attributes and the degree to which it provides meaningful work(Hussien et al., 2020).

Eight items related to work environment on a five-point Likert scale from strongly disagree = 1 to strongly agree =5 were asked. Overall scores for each items was added up and those health professionals whose scored above the mean values was labelled having good work environment otherwise poor work environment (Røssberg et al., 2004).

- ✓ **Work pressure**: the pressure caused by workload of work present in the health facilities.(Kalifa et al., 2016, Rai, 2015)

  Work pressure was measured by scale taken and modified from (Kalifa et al., 2016) which have 5 items with 5 point likert scale. Overall scores for each items was added up and those scored above the mean values was labelled having low work pressure otherwise have high work pressure.
- ✓ Workload: defined as hours worked per week (classified in to <= 54,55-56,57-64 & >=65) (Oh and Kim, 2019)
- ✓ **Organizational commitment:** is defined as potential of connection among employees and the organization(Bonds, 2017), (Keskes, 2014).

  Organizational commitment was measured 18 items which is 6 items under each affective, continuance and normative organizational commitment. The overall score of each subscale were added and those above median of each subscale classified as having good affective commitment, continuance commitment & normative commitment otherwise poor (Meyer et al., 1993, AlHaroon and Al-Qahtani, 2020).

3.11. Data quality control

One day of intensive training was provided about the instruments, ways of data collection, ethical issues and aims of the study for data collectors and supervisors. To ensure the quality of data, English structured and pretested questionnaire was used. Pre-test was conducted on five present (5%) of study population that is 30 health professionals working in Wachale health center, the health facility outside the study area, in order to check for the consistency and inaccuracy of the questioner. Finally ambiguous and unclear questions were modified before the data collection. To keep completeness, consistency and accuracy, data collectors were closely supervised before and during the data collection process on daily bases by the assigned supervisor. The principal investigator was also supervised the correct implementation of the procedure and checked completeness and logical consistence after data collection. During data analyses, double data entry was done by one data clerk and principal investigator to minimize errors.

3.12. Method of data process and analysis

All filled checklist was checked for completeness and consistency. All collected data were cleaned, coded and doubled entered in to the Epi-data 3.1 software. Then the data was exported to statistical software STATA 16. Descriptive analyses of all variable were done after checking the distribution of data. Univariable analysis (frequency and percentage) was done for categorical variables and continuous variable was expressed by mean ±SD. Cross-tabulation with frequency and percentage of each variable was performed to explore the relation between dependent variable and independent variable. The result was presented by narration, tables and graphs.

Bivariable binary logistic regression was done to identify candidate variable for multivariable logistic regression. Those variable with p-value less than (<0.25) considered as a nominee variable to develop a model for multivariable logistic regression and multivariable binary logistic regression analysis was performed. In order to measure the strength of the association between the outcome and independent variable Odds Ratio with 95% Confidence Interval (CI) was computed. Finally variables whose p value less than 0.05 ($p<0.05$) in multivariable binary logistic regression was used to state statistically significant. Model fitness was checked by Hosmer-lemeshow test and the model was fitted at the value of 4.97and multi-collinarity test was carried out by using VIF and the result was equals to 1.42.

Dependent variable in this study was measured by measure of intention to leave scale adopted from (Yamazakia and Petchdee, 2015) which is composed of three items with 5 point likert scale. The items were: (1) As soon as I can find a better job, I will leave the organization; (2) I am actively looking for a job outside the organization; and (3) I am seriously thinking of quitting my job. Response ranged by 5-point Likert Scaling from 1= “Strongly disagree” to 5= “Strongly agree”. Minimum score is 3 and the maximum score is 15. Higher score indicated higher intention to quit from a job, which is those score above the mean labelled as having intention to leave otherwise not have intention to leave.

Independent variables were measured by scale taken from different literatures. Job satisfaction, Work pressure, Organizational commitment: affective, continuance and normative commitment and Work environment are measured by 5 point likert scale and the items was added up and those who scored above the mean was labelled as satisfied, committed, low work pressure otherwise dissatisfied, have low commitment, high work pressure and so on.

3.13. Ethical considerations

Ethical clearance was obtained from Haramaya University, College of health and Medical sciences and Institutional Health Research Ethics Review Committee (IHRERC) in order to obtain permission to proceed with data collection, the official letter & proposal were sent to selected hospital and health centers administration. Informed, written voluntary and signed consent was obtained from each participant prior to enrolment. Anonymity was also insured. It is clearly stated in a written form that participation was not obligated and that there was no harm in participating or refusing to participate.

3.14. Dissemination of results

The results of this study will be presented to MPH defense in Haramaya University Collage of health and medical science. Hard copy and soft copy of the study will be submitted to Haramaya University, Fafan zonal health office and referral hospital. Efforts will be made to publish the findings of the study and will be disseminated through different scientific journals.

4. Results

4.1 Socio-demographic characteristics of respondents

A total of five hundred forty-nine respondents completed and returned the questionnaires, making a response rate of 93.5%. The median (±Inter Quartile Range) age of the health professionals was 30(±7 IQR) which ranged from 20-60 years. More than three-fifth, 61.0% of the participants were males and half, 49.36% were married. Nearly half, 50.82% were Bachelor of Science (BSc) holders and 45.0% were nurses in profession (Table 1).

Table 1 Socio-demographic characteristics of health professionals in public health facilities in Fafan Zone, Eastern Ethiopia, 2020

Characteristics	Categories	Frequency	Percentage (%)
Sex	Male	335	61.0
	Female	214	39.0
Age(years)**	20-30	294	53.6
	31-40	213	33.8
	41-60	42	7.65
Marital status***	Never married	249	45.36
	Married	271	49.36
	Divorced & widowed	29	5.28
Profession	Nurse	247	44.99
	Midwifery	118	21.49
	health officer	17	3.10
	Laboratory	41	7.47
	Medical doctor	80	14.57
	Pharmacy	36	6.56
	Other*	10	1.82
Level of education	Diploma	185	33.70
	Degree	279	50.82
	Master's Degree	5	0.91
	Medical doctor	80	14.57

Note: * “other” anaesthetics’, Radiology MRT, Radiology technician, Physiotherapist, Environmental health, ** Age was categorized based literature (Worku et al., 2019), Marital status was categorized based literature (de Oliveira et al., 2017).

4.2 Organizational related factors

The majority of the participants (66.5%) have worked in referral hospitals and total of 7.8% of health professionals had position currently. From total respondents 8.93% of them had got recognition in their current health facility, 29.87% had got career development opportunity and 21.13% had got professional supervision. About 64.0% of respondents had poor work environment. About 55% of the respondents were experienced low level of organizational commitments and three-fifth have experienced poor normative commitment (Table 2).

Table 2 Organizational related factors of health professionals in public health facilities in Fafan Zone, Eastern Ethiopia, 2020

Variables	Categories	Frequency	Percentage (%)
Type of facility	Health center	184	33.5
	Referral hospital	365	66.5
Residence	Urban	427	77.78
	Rural	122	22.22
Have position currently	Yes	54	9.84
	No	495	90.16
Recognition in current health facility	Yes	49	8.93
	No	500	91.07
Career development opportunity	Yes	164	29.87
	No	385	70.13
Professional supervision in the last one year	Yes	116	21.13
	No	433	78.87
The frequency of supervision in the last one year	Adequate	17	3.10
	Inadequate	99	18.03
	Not at all	433	78.87
Work environment	Poor	351	64.0
	Good	198	36.0
Organizational commitment			
Affective commitment	Poor	317	57.7
	Good	232	42.3
Continuance commitment	Poor	293	53.4
	Good	256	46.6
Normative commitment	Poor	327	59.6
	Good	222	40.4
Over all Organizational Commitment	Poor	303	55.2
	Good	246	44.8

4.3 Work-related factors

The median (± IQR) work experience of participants were 3(±3 IQR) years. The average working hour per week of the respondents was 58.67(±9.9SD). The mean monthly income of the respondents was 10183(±5774SD) Ethiopian Birr (ETB). Out of respondents almost half of them were not satisfied with overall job and 324(59%) had high work pressure and three-fifth have experienced poor work environment (Table 3)

Table 3 Work related factors of health professionals in public health facilities in Fafan Zone, Eastern Ethiopia, 2020

Variable	Categories	Frequency	Percentage (%)
Work experience*	≤2	197	35.88
	3-5	229	41.71
	≥6	123	22.41
Average working hour per week **	≤54	181	32.97
	55-56	100	18.21
	57-64	141	25.68
	≥65	127	23.13
Monthly income (ETB)**	≤ 6700	143	26.05
	6800-8600	131	23.86
	8700-11400	141	25.68
	≥11500	134	24.41
Job satisfaction	Not satisfied	282	51.4
	Satisfied	267	48.6
Work pressure	Low	225	41.0
	High	324	59.0

Note: Work experience was categorized based literature (Worku et al., 2019), ** Average working hour per week & Monthly income (ETB) categorized by quantile method.

4.4 Magnitude of Intention to leave

From the total of 549 health professionals consented for the study, 322(58.7%, 95% CI: 54.4-62.8%) of them had the intention to leave their current health facility. Among the total respondents, 64.5% had intended to leave their organization as soon as they can find a better job, 51% were actively looking for a job outside the organization and 36% were seriously thinking of quitting their job (Table 4).

Table 4 Magnitude of Intention to leave of health professionals in public health institutions in Fafan Zone, Eastern Ethiopia, 2020.

Variable	Categories	Frequency	Percentage%
As soon as I can find a better job, I will leave the organization	Yes	354	64.5
	No	195	35.5
I am actively looking for a job outside the organization	Yes	280	51.0
	No	269	49.0
I am seriously thinking of quitting my job	Yes	199	36.0
	No	350	64.0
Intention to leave	Yes	322	58.6
	No	227	41.4

4.5 Factors associated with intention to leave of health professionals

In the analysis of bi-variable logistic regression, variables with P-value <0.25 were age, marital status, work experience, position, professional supervision, job satisfaction, work pressure, affective commitment, continuance commitment, normative commitment and work environment (Table 5).

Table 5 Bivariate binary logistic regression analyses of health professionals intention to leave and associated factors in public health facilities in Fafan zone, Eastern Ethiopia, 2020.

Variables	Category	Intention to leave		Crude OR, 95%CI	P-value
		Yes	No		
Age(year)	20-30	222 (75.5%)	72(24.5%)	3.98 (2.72 5.814)	0.000
	31-40	93(43.7%)	120(56.3%)	1	1
	≥ 41	7(16.7%)	35(83.3%)	0.26 (0.1097- 0.607)	0.000
Marital status	Never married	180(72.29%)	69(27.71%)	2.63(1.82 - 3.79)	0.000
	Married	135(49.82%)	136(50.18%)	1	1
	Divorced & Widowed	7(24.14%)	22(75.86%)	0.32(0.13 - 0.77)	0.012
Work experience	≤ 2	135(68.5%)	62(31.5%)	3.9(2.42 - 6.29)	0.000
	3-5	143(62.45%)	86(37.55%)	2.98 (1.89 - 4.70)	0.000
	≥ 6	44(35.8%)	79(64.2%)	1	1
Position	Yes	23(42.6%)	31(57.4%)	0.64(0.275 - 0.86)	0.013
	No	229(60.40%)	196(39.6%)	1	1
Professional supervision	Yes	59(50.9%)	57(49.1%)	0.67(0.44 - 1.010)	0.056
	No	263(60.7%)	170 (39.3%)	1	1
Job satisfaction	Satisfied	128(47.9%)	139(52.1%)	1	1
	Not satisfied	194(68.8%)	88(31.2%)	2.39(1.69-3.39)	0.000
Work pressure	High	208(64.2%)	116(34.8%)	1.75(1.23-2.47)	0.002
	Low	114(50.7%)	111(49.3%)	1	1
Affective commitment	Good	88(37.9%)	144(62.1%)	1	1
	Poor	234(73.8%)	83(26.2%)	4.61(3.20-6.64)	0.000
Continuance commitment	Good	113(44.1%)	143(55.9%)	1	1
	Poor	209(71.3%)	84(28.7%)	3.148(2.21-4.48)	0.000
Normative commitment	Good	111(50%)	111(50%)	1	1
	Poor	211(64.5%)	116(35.5%)	1.82(1.28-2.57)	0.001
Work environment	Poor	244(70%)	107(30%)	3.51(2.44 - 5.05)	0.000
	Good	78(39%)	120(61%)	1	1

In multivariable analysis, all variables that showed association (p-value<0.25) with intention to leave in bivariate binary logistic regression were selected as candidate for multivariate analysis and fitted into the multivariable binary logistic regression. After controlling the effect of confounder age, job satisfaction, affective commitment, continuance commitment, and work environment were showed statistically significant at p-value <0.05. Health professionals' whose age 20-30 were almost three times more likely to have intention to leave than health professionals whose age group were 31-40 (AOR=2.84, 95% CI: 1.73- 4.67). Those who were not satisfied with their job were 1.86 times more likely to have intention to leave than those who were satisfied (AOR= 1.86, 95% CI: 1.18 – 2.93) (Table 7).

Health professionals who have poor affective commitment were 3.69 times more likely to have intention to leave than their counterparts (AOR= 3.69, 95% CI: 2.33- 5.83). Similarly, health professionals who have poor continuance commitment were three times (AOR=3.65, 95% CI: 2.32 – 5.75) more likely to have intention to leave than health professionals with good continuance commitment. Also health professionals who have poor work environment were 2.7 times more likely to have intention to leave than those who have good work environment (AOR= 2.61, 95% CI: 1.63 - 4.18) (Table 7).

Table 6 Multivariate logistic regression analyses for intention to leave and associated factors among health professionals in public health institutions in Fafan Zone, Eastern Ethiopia, 2020

Variables	Category	Intention to leave		Crude OR	Adjusted OR
		Yes	No		
Age(year)	20-30	212 (69.06%)	95(30.94%)	3.98 (2.72- 5.81)	**2.84(1.73- 4.67)***
	31-40	103(51.5%)	97(48.50%)	1	1
	≥ 41	7(16.7%)	35(83.33%)	0.26 (0.11- 0.61)	**0.29 (0.10- 0.82)***
Job satisfaction	Satisfied	128(47.9%)	139(52.1%)	1	1
	Not satisfied	194(68.8%)	88(31.20%)	2.39(1.69 -3.39)	**1.86 (1.18 - 2.93)***
Affective commitment	Good	88(37.9%)	144(62.1%)	1	1
	Pooer	234(73.8%)	83(26.20%)	4.61(3.20- 6.64)	**3.69(2.33 – 5.83)***
Continuance commitment	Good	158(62.7%)	54(37.30%)	1	1
	Poor	164(55.2%)	133(44.8%)	3.148(2.21-4.48)	**3.65 (2.32 - 5.75)***
Work environment	Poor	244(70%)	107(30%)	3.51(2.44 - 5.05)	**2.61(1.63 - 4.18)***
	Good	78(39%)	120(61%)	1	1

*significant at P-value <0.05

5. Discussion

This study showed that 58.65% health professionals had intention to leave their health facilities. The study also identified that younger age, job satisfaction, affective commitment, continuance commitment and work environment as factors that were statistically significantly associated with intention to leave of health professionals.

The finding of this study revealed that 58.65% of the respondents had intention to leave their health facilities. This result is higher than those of studies conducted at Public Health Facilities of Gambella Region, Southwest Ethiopia among health professionals' (48.4%) (Woldegiorgis et al., 2015) and at the University of Gondar referral hospital among health professionals (52.5%) (Abera et al., 2014). These discrepancies could be due to differences in infrastructures in health institution, study setting, study period and sample size. This finding is consistent with the magnitude of intention to leave reported 61.3% in North Shoa Zone among health professionals (Ferede et al., 2018) and 59.4% Jimma Zone health institutions among health professionals(Gesesew et al., 2016). This could be due to same study setting (both study include health centers as well as hospital) and Study participants (both study include all types of health professionals).

Additionally, our finding is much higher than those of studies conducted among health professionals in Tanzania (18.8%), Malawi (26.5%), and South Africa 41.4% (Blaauw et al., 2013), these could be due to variations in presence of attractive salary and other incentives because all the three countries had on-going human resource for health (HRH) interventions for HRH crisis in the country (Blaauw et al., 2013). Also 42.3% in China among primary care doctor (Wen et al., 2018) and 30.5% in Korea among doctors (Oh and Kim, 2019). These differences could be due to variations in presence of attractive salary and other incentives, better infrastructures in health facilities, study settings and study participants regard to all health professionals.

However, it is lower than the result of studies done among health professionals at North Gondre zone public primary hospitals (67.8%) (Worku et al., 2019), Nurses Working in Emergency Departments of Governmental Hospitals in Addis Ababa, Ethiopia (77.5%) (Wubetie et al., 2020) and health professionals working at Yirgalem and Hawassa referral hospitals (83.7%) (Nenko and Vata, 2014). This discrepancy could be due to variation in study areas that is in the previous studies it focuses on urban areas while ours include both urban and rural areas, variation in study setting that is all the previous studies done on

hospitals only while our study include both hospital and health centers and in hospitals there could be high workload which affects their intention to leave, variation in study participants that is study in Addis Ababa focus on nurses working at emergency department only and emergency nurses might have high work load and this may enforces them to have more intention to leave their health facility as compared with other health professionals.

Health professionals whose ages 20-30 years were 3 times more likely to have intention to leave than health professionals whose age group were 31-40 which is supported by findings of other studies in Ethiopia (Kols et al., 2018), North Gonder zone Ethiopia (Worku et al., 2019), China(Wen et al., 2018) and Korea(Oh and Kim, 2019). It's also consistent with a multi-country study conducted in Tanzania, Malawi, and South Africa found that intention to leave decreased significantly with age. The odds of leaving in the over 50 age group were half of those under 30 years(Blaauw et al., 2013). In support of previous studies a comprehensive literature review also showed that researchers have consistently found an inverse relationship between age and intention to leave among nurses (Hayes et al., 2006). This might be due to young health workers might be unmarried and have fewer family ties that makes them to move anywhere in anticipation of getting better benefits, to further their education or career. Additionally, it could be due to young health professionals are more exposed to repetitive tasks, participating less in decision making, being paid less, and having fewer close friends in the workplace.

Our finding also showed that health professionals who were not satisfied with their job were almost 2 times more likely to have intention to leave than those who were satisfied. This finding is similar to studies done in Ethiopia (Gesesew et al., 2016, Getie et al., 2015, Hailu et al., 2016, Kalifa et al., 2016). Researchers have consistently found an inverse relationship between job satisfaction and intention to leave, that is those who were satisfied with their job had reduced odds of intention to leave as supported by A study in United States (Leider et al., 2016), A study conducted in Erbil, Iraq (Anwar and Shukur, 2015), study conducted in Ghana (Bonenberger et al., 2014) and Boston, Massachusett (Davidson et al., 1997). These is because health professionals who do not satisfied with their job may not be motivated and are less likely to provide safe and quality care, satisfy their clients, and stay in their current job.

Health professionals who have poor affective commitment were 3.69 times more likely to have intention to leave than their counterparts. This study corroborates with previous studies conducted Ethiopia (Worku et al., 2019, Dellie et al., 2019) and Malaysia(Omar et al., 2012)

which showed that health professionals with low affective commitment were more likely to have intention to leave their organizations. Employees with strong affective commitment remain because they want to(Alen and Meyer, 1990). This might be employees who have poor affective commitment do not have sense of belonging or not involved and linked emotionally, they want to leave the organization.

Health professionals who have poor continuance commitment were 3.65 times more likely to have intention to leave than health professionals with good continuance commitment. This finding is supported by other study in Ethiopia (Dado et al., 2019) which reported that the higher organizational commitment with continuance commitment category health professional will stay with their current employers. Also supported by other study which reported that when employee's continuous commitment is high, and they understand the cost of leaving the organization, then intension to leave will be low (Indradevi and E.Veronica□, 2018).

Work environment were also indicated as determinant of intention to leave. Health professionals who have poor work environment were three times more likely to have intention to leave than those who have good work environment. This study is buttressed by studies done in Ethiopia (Kalifa et al., 2016, Asegid et al., 2014) and A study conducted in Taiwan indicated that when nurses in long term care experience an unpleasant working atmosphere, this would increase their intention to leave their organization (Tzeng, 2002). This might be due to professionals who have poor work environment may not have good co-workers relation, not get support, not satisfied with their wards making them to have low confidence and demotivated to work resulting in intention to leave.

6. Limitation and strength of the study

6.1. Strength of the study

This study assessed health professionals' intention to leave their current organization among all health professionals working at public health facilities. The sample includes health professionals working at both the urban and rural public health facilities.

6.2. Limitation of the study

The study had the usual limitation of a cross sectional study and thus provides only a snapshot of health professionals' perspectives at one point in time. The intention to leave scale used by this study did not show the exact time or when they intend to leave the organization and the study was not triangulated with a qualitative method.

The use of self-reporting measures may have some potential of minimizing reporting bias, which may occur due to respondents' interpretations of questions. Furthermore, there are other factors that were not assessed in this study but they may affect the health professionals' intention to leave.

Finally the data of this study were collected through questionnaire only. Therefore, accuracy of the feedback is dependent on the voluntary cooperation of the respondents.

7. Conclusion and Recommendation

7.1. Conclusion

Health professional's intention to leave public health institutions was 58.7%. Younger age, not satisfied with job, poor affective commitment, poor continuance commitment and poor work environment were the factors that influence intention to leave.

7.2. Recommendation

Although the results of a single survey can not in themselves be considered as a solid foundation for making decisions, Based on the results of the study the following were recommended:

Fafan zone health office

Fafan zone managers and other stakeholders' need to develop and implement retention strategies that aim at creating an attractive nature of work enviroment. Also need to develop strategies to improve health professionals' organizational commitment and job satisfaction and Promoting youner ages' group by supporting.

Referral hospital

Referral hospital managers, supervisors, and other stakeholders' need to develop and implement retention strategies that aim at creating an attractive creating an attractive nature of work enviroment. Also need to develop strategies to improve health professionals' organizational commitment and job satisfaction

Health center

Health centers managers need to develop and implement retention strategies that aim at creating an attractive creating an attractive nature of work enviroment. Also need to develop strategies to improve health professionals' organizational commitment and job satisfaction

Researchers

Factors affecting intention to leave are complex and cannot only be established using quantitative studies. It is vital to undertake more detailed studies triangulated by qualitative method and provide greater explanatory detail for factors affecting all types of health professionals' intention to leave at all types of public as well as private health institutions.

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9. ANNEXES

9.1 Annex A: Information sheet and informed voluntary consent form for health professionals

My name is _____. I am working as a data collector for the study being conducted in this community by Hikmet Abdurahmanwho is studying for her Master's degree at Haramaya University, Collage of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about the study and your institution being selected as the study participant.

The study/project title: intention to leave and associated factors among health Professionals in public health facilities in Fafan Zone, Somali region, eastern Ethiopia: a cross-sectional study

Purpose/aim of the study: The main aim of this study is to write a thesis as a partial requirement for the fulfilment of a master's degree in Health Service Management (HSM) for the principal investigator. Moreover, the he findings of this study can be of a paramount importance for the Hospital or health center to plan on factors associated with health professionals' intention to leave their job and in order to develop health professionals' retention strategy and decrease their turnover.

Procedure and duration: Self-administered questioner on the intention to leave which contains 101 items divided in to two parts, which is 27 from social-demographic characteristics and 74 for intention to leave is divided into different parts of determinants with its subdivided domain will be given for you to fill it. The questionnaire will take 20 minutes to fill it, so I kindly request you to spare me this time for the interview.

Risks and benefits: The risk of participating in this study is very minimal, but only taking few minutes from your time. There would not be any direct payment for participating in this study. But the findings from this research may reveal important information for the Hospital Managers and Regional Health bureau planners.

Confidentiality: The information you will provide us will be confidential. There will be no information that will identify you in particular. The findings of the study will be general for the study community and will not reflect anything particular of individual persons or housing. The questionnaire will be coded to exclude showing names. No reference will be made in oral or written reports that could link participants to the research.

Rights: Participation for this study is fully voluntary. You have the right to declare to participate or not in this study. If you decide to participate, you have the right to withdraw from the study at any time and this will not label you for any loss of benefits which you otherwise are entitled. You do not have to answer any question that you do not want to answer.

Contact address: If there are any questions or enquires any time about the study or the procedures, please contact: Hikmet Abdurahman, Principal Investigator, at mobile phone number +250933401687 or email address : hikmetmuluka@gmail.com as well as the Haramaya University Institutional Health Research Ethics Review Committee (IHRERC) at office phone 0254662011 or P.O.Box 235, Harar, Ethiopia.

Declaration of informed voluntary consent:

I have read the participant information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I also read that I have the right to withdraw from the study at any time or not to answer any question that I do not want. Therefore, I declare my voluntary consent to participate in this study with my initials (signature).

Name and Signature of health professional_____Date _____

Name and Signature of Data Collector_____Date _____

Thank you for your cooperation!

9.2 Annex B: Information sheet and informed voluntary consent form for head of the hospital/ health center

My name is _____. I am working as a data collector for the study being conducted in this hospital/ health center on Intention to leave and associated factors among health Professionals by Hikmet Abdurahman who is studying for her Master's degree at Haramaya University, Collage of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about the study and your institution being selected as the study setting**.**

The study title: Intention to leave and associated factors among health Professionals in public health facilities in Fafan zone, Somali region, eastern Ethiopia

Purpose of the study: The main aim of this study is to write a thesis as a partial requirement for the fulfilment of a master's degree in Health Service Management (HSM) for the principal investigator. Moreover, the he findings of this study can be of a paramount importance for the Hospital or health center to plan on factors associated with health professionals' intention to leave their job and in order to develop health professionals' retention strategy and decrease their turnover.

Procedure and duration: Self-administered questioner on the intention to leave which contains 101 items divided in to two parts, which is 27 from social-demographic characteristics and 74 for intention to leave which is divided into different parts of determinants with its subdivided domain will be given for you to fill it. The questionnaire will take 20 minutes to fill it, so I kindly request you to spare me this time for the interview.

Risks and benefits: The risk of participating in this study is very minimal, but only taking few minutes from health professionals time. There would not be any direct payment for participating in this study. But the findings from this research may reveal important information for the Hospital Managers and Regional Health bureau planners.

Confidentiality: The information that we will be provided will be kept confidential. There will be no information that will identify the participants in particular. The findings of the study will be general for the study community and will not reflect anything particular of individual persons. The questionnaire will be coded to exclude showing names. No reference will be made in oral or written reports that could link participants to the research.

Rights: Participation for this study is fully voluntary. The participants have the right to declare to participate or not in this study. If they decide to participate, they have the right to withdraw from the study at any time and this will not label them for any loss of benefits which they otherwise are entitled. They do not have to answer any question that they do not want to answer.

Contact address: If there are any questions or enquires any time about the study or the procedures, please contact: Hikmet Abdurahman, Principal Investigator, at mobile phone number +250933401687 or email address: hikmetmuluka@gmail.com as well as theHaramaya University Institutional Health Research Ethics Review Committee (IHRERC) at office phone 0254662011 or P.O.Box 235, Harar, Ethiopia.

Declaration of informed voluntary consent:

I have read the participant information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that participants have the right to withdraw from the study at any time or not to answer any question that they do not want. I am also informed that the Hospital has the right to stop this study from being conducted if any misdeeds and unethical procedures are observed during the data collection process in the Hospital's premises. Therefore, I declare my voluntary consent on behalf of Karamara Hospital / Sultan Sheik HassenYeberrehospitalHospital (SSHYH) management to allow this study to be conducted in the Hospital with my initials (signature).

Name and Signature of head of the hospital/ health center: _____Date _____

Name and Signature of Data Collector: _____Date _____

Thank you for your cooperation!!

9.3 Annex C: Questionnaire

Study checklist to assess intention to leave and associated factors among health professionals in public health facilities in Fafan Zone, Eastern Ethiopia

Part I: Socio-demographic characteristics of the participants

Please circle the number in front of the option you choose on the right side of the table.

Code	Questions	Responses	Skip
001	Sex	1. Male 2. Female	
002	What is your age in completed years?	_____ years	
003	What is your marital status	1. Never married 2. Married 3. Divorced/Separated 4. Widowed 5. Other _____	
004	Type of health facility you are currently working in?	1. Health center 2. Primary hospital 3. General hospital 4. Referral hospital 5. Other _____	
005	What is your Profession?	1. Nurse 2. Midwifery 3. Health officer 4. Laboratory 5. Doctor 6. Internist 7. Other (specify) _____	
006	What is your current level of education?	1. Diploma 2. Degree 3. Master's Degree	

		4. Other(specify) _____	
007	How long have you worked at this health facility? (in completed years)	_____ years	
008	Have you ever worked at another health facility before this health facility?	1. Yes 2. No	If yes to Q8, nswer Q9
09	For how long have you worked at your previous health facilities?	_____	
010	What is your current Residence?	1. Urban 2. Rural	

Part Two: -factors related to intention to leave

Instruction: please circle the number in front of the option you choose on the right side of the table or indicating your exact ticking in the box

2.1 **organizational related factors**			
101	Do you have any position?	1. Yes 2. No	If no go to Q104
102	What types of position do you have?	_____	
103	How many hours (on average) do you work per week?	_____ hours	
104	What is Your current monthly salary	_____ETB	
105	What is your average duty payment per month	_____ ETB	
106	What is your average other payments (perdiem, training payment, and other)	_____ETB	
107	What is your average household monthly income?	_____ETB	
108	Have you ever got recognition for your work while you are in the current facility?	1. Yes 2. No	If no skip to Q108
109	If you get recognition, what kind of recognition do you get	1. Certificate 2. Letter 3. Money	

		4.Other (specify)_____	
110	Is there carrier development opportunity in your institution?	1. Yes 2. No	If no skip to Q 112
111	If there is carrier development, what kind of development opportunity is available?	1. Education 2. Training 3. Promotion 4. Other (specify)	
112	Have you ever got professional supervision in your current position?	1. Yes 2. No	
113	If yes to Q112, how frequently have you supervised in the last one year?	_____	

2.2 Job satisfaction

Code	On my present job, this is how I feel about	Very Dissatisfied	Dissatisfied	Neutral	Sattisfied	Very satisfied
201	Being able to keep busy all the time					
202	The chance to work alone on the job					
203	The chance to do different things from time to time					
204	The chance to be "somebody" in the community					
205	The way my boss handles his/her workers					
206	The competence of my supervisor in making decisions					
207	Being able to do things that don't go against my conscience					
208	The way my job provides for steady employment					
209	The chance to do things for other people					
210	The chance to tell people what to do					
211	The chance to do something that makes use of my abilities					
212	The way company policies are put into					

	practice					
213	My pay and the amount of work I do					
214	The chances for advancement on this job					
215	The freedom to use my own judgment					
216	The chance to try my own methods of doing the job					
217	The working conditions					
218	The way my co-workers get along with each other					
219	The praise I get for doing a good job					
220	The feeling of accomplishment I get from the job					
2.3 Work pressure Items Please indicate your level of agreement /disagreement by indicating your exact ticking in the box for your exact feeling based on the following "SD'' for strongly disagree "D'' for Disagree ''N'' for Neutral, "A'' for Agree & "SA'' for Strongly agree						
On my present job, this is how I feel about		**SD**	**D**	**N**	**A**	**SA**
301	I always finish my work on time					
302	I have Heavy workload					
303	I always feel too much responsibility for patient outcomes.					
304	I feel restless with long working hours and the hospital/ health center shift schedule.					
305	I do not work under the threat of losing my jobs.					
2.4 Organizational Commitment subscale and items		**SD**	**D**	**N**	**A**	**SA**
Affective Commitment Scale						
401	I would be very happy to spend the rest of my career with this organization.					
402	I really feel as if this organization's problems are my own.					
403	I do not feel a strong sense of "belonging" to					

	my organization.					
404	I do not feel "emotionally attached" to this organization.					
405	I do not feel like "part of the family" at my organization.					
406	This organization has a great deal of personal meaning for me.					
Continuance Commitment		SD	D	N	A	SA
407	Right now, staying with my organization is a matter of necessity as much as desire					
408	It would be very hard for me to leave my organization right now, even if I wanted to.					
409	Too much of my life would be disrupted if I decided I wanted to leave my organization now.					
410	I feel that I have too few options to consider leaving this organization.					
411	If I had not already put so much of myself into this organization, I might consider working elsewhere					
412	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.					
Normative Commitment Scale		SD	D	N	A	SA
413	I do not feel any obligation to remain with my current employer.					
414	Even if it were to my advantage, I do not feel it would be right to leave my organization now.					
415	I would feel guilty if I left my organization now.					
416	This organization deserves my loyalty					
417	I would not leave my organization right now					

	because I have a sense of obligation to the people in it.					
418	I owe a great deal to my organization.					
2.5 Work environment		SD	D	N	A	SA
501	What I do on the ward gives me big chance to see how good my abilities really are					
502	What I do on ward help me to have more confidence on myself					
503	I feel nervous or tense on this ward					
504	I often worried about going to work					
505	I often feel that I get the support I need, when I face with difficult treatment problems					
506	To large extent I find that I can use myself, my knowledge and experience in the work here on this ward					
507	I find that the patient treatment is complicated by conflict among the staff members					
508	I find that it can be difficult to reconcile loyalty towards my team with loyalty towards my own profession					

Part III Intention to leave

The following statement related to intention to leave at your organization; please indicate your level of agreement/disagreement by ticking in the box for your exact feeling based on the scale below. "SD'' for strongly disagree "D'' for Disagree ''N'' for Neutral, "A'' for Agree & "SA'' for strongly agree

Code	Intention to leave Items	SD	D	N	A	SA
101	As soon as I can find a better job, I will leave the organization					
102	I am actively looking for a job outside the organization					
103	I am seriously thinking of quitting my job					

Thank you!

9.4 Annex D: Curriculum vitae

I. PERSONAL INFORMATION

Full Name	Hikmet Abdurahman Mume
Address	Haramaya, Ethiopia
Telephone	+251933401687
E-mail	hikmetmuluka@gmail.com
Nationality	Ethiopia
Date of birth	July 21, 1992
Gender	Female
Desired Employment	Researcher/Program Related officer
Occupational field	Public Health Officer

II. WORK EXPERIENCE

From 2004 to 2005 E.C as Out Patient Department Head, as surveillance officer as well as under five OPD patient care provider

From 2005 to 07/ 2007 E.C as head of Primary Health Care Unit at Haramay Woreda, Adelle Health Centre

From 21/07/2007 E.C as Instructor at Jigjiga University Medicine & Health Science College

III. EDUCATIONAL BACKGROUND

Level of Education	**Institution**	**Year of study**
Primary School	Haramaya University Model School	1988-1993E.C
Junior School	Haramaya University Model School	1994-1995 E.C
High School	Medhana Alem Comprihensive Secondary School	1996-1997
Preparatory	Harar Senior Secondary School	1998-1999 E.C
Higher Education	Haramaya University College of Medicine & Health Science	2000-2003 E.C

Date & Qualification awarded Bachelor of Science in Health Officer 2003 E.C

IV. PERSONAL SKILL & COMPETENCE

Mother tong's Oromo Language

Other Languages English, Amharic, Harari Language

Language	Understanding		Speaking		Writing
	Listening	Reading	Spoken Interaction	Spoken Production	
English	Excellent	Excellent	Very Good	Very Good	Very Good
Amharic	Excellent	Excellent	Excellent	Excellent	Excellent
Oromo Language	Excellent	Excellent	Excellent	Excellent	Excellent
Harari Language	Excellent	Very Good	Very Good	Very Good	Very Good

Social Skill &Competence:

Was Social Committee Leader in the Health Center, Socially renowned

Arbitrator for those who doesn't have agreement in the nearby Social environment

Organization Skill & Competence

- ✓ Out Patient officer focal person in Haramaya Woreda FinkileH/C
- ✓ Surveillance Officer focal person in Haramaya Woreda Finkile Health Center
- ✓ Have good skill on treating patient at both Adult &<5 OPD
- ✓ Have excellent skill in giving Service for the client at Family Planning , ANC , EPI ,Delivery & other MCH activities
- ✓ Have Excellent Skill in Treating & giving good service for TB &Leprosy & HIV Patient
- ✓ Have excellent skill in giving training for Health professionals &HEWs on different training
- ✓ Have also excellent skill in leadership working as Head Of Health Center In Haramaya Woreda Adelle Health Center (head of Primary Health Care Unit (PCU)).
- ✓ Now working as instructor in Jigjiga University Medicine & Health Science College

Technical skills & Competence: Medical procedures like IV – securing, Catheter, Enema, NGT insertion, suturing & other minor surgery

Computer Skills & Competences: Abel to use very well in daily life & also use d/t applications and Soft wares

V. TRAININGS

Different Trainings taken	**Time**	**Organizations that Gives the trainings**
Certified with English writing skil	June,2000 E.C	Haramaya University
Surveillance	August, 2003	WHO
ICCM Training & TOT	Oct, 2004	IFHP
ENA(Essential Nutritional Skill) TOT	Nov, 2004	IFHP
CBN (Community Based Nutrition)	Jan, 2004	CARE
IMNCI (Integrated Management of New-born & Child illness) TOT	April, 2005	IFHP
Management Of Sever Acute Malnutrition	June,2005	CARE
PMTCT (Prevention Of Mother to Child HIV Transmission)	Sep,2006	Intra Health
HIGHER DIPLOMA PROGRAM (HDP)	Sep- Feb 2009	Jigjiga University (JJU)
Effective Teaching Skill (ETS)	Nov, 2009	JJU & UNICEF

VI. REFERENCE

- Ato Lema Oljira East Hararge Coordinator Of IFHP
  +251947828128
- Ato MesfinTaye E/Hararge Health Office Nutrition Focal Person
  +251915025396
- Ato Wubareg Seifu Vice Dean of College of Medicine and Health Science Of JJU
  +251920981050

Finally I, the under signed, assure that the above piece of information are true and correct to the best of my knowledge

Signature _____

Name: Hikmet Abdurahman

Date: 26/07/2019

9.5 Annex E: Approval sheet

HARAMAYA UNIVERSITY SCHOOL OF GRADUATE STUDIES

Intention to leave and associated factors among health Professionals in public Hospitals in Fafan Zone, Somali region, eastern Ethiopia

Submitted by:

Hikmet Abdurahman _____ _____

Name of student signature Date

Approved by:

1. _____ _____ _____

Name of Major Advisor Signature Date

2. _____ _____ _____

Name of Co-advisor Signature Date

3. _____ _____ _____

Research thematic area leader Signature Date

4. _____ _____ _____

Chairman, DGC/SGS Signature Date

5. _____ _____ _____

Dean, PGPD Signature Date