

**Level of Health professionals Commitment towards Increasing Uptake of Institutional Delivery Services and Associated Factors at Government Health Facilities in Jimma Zone, Southwest Ethiopia**

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**Level of Professional Commitment of Health professionals  
and Associated Factors at Government Health Facilities in Jimma  
Zone, Southwest Ethiopia:-Implication towards Increasing Uptake of  
Institutional Delivery Services**

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## **Abstract**

**Background:** Professional commitment is beyond a commitment for a particular organization and implies the individuals' perspective towards their profession and the motivation that they have to stay in their job which refers to one's loyalty to the profession and the willingness to strive and uphold the values and goals of the profession to maintain membership in that profession. There is a general conviction that professional commitment of health workforce has a positive and significant impact upon business performance and reform process of health system. The quality and effectiveness of health systems critically depends on the size, skills and commitment of the health workforce. In Ethiopia, the National, regional (Oromia) and Zonal (Jimma) level of family planning and ANC coverage were in good status but uptake of institutional delivery service (IDS) coverage was still low. In Oromia region, IDS utilization is about 13%, which is lower than the national level (16%). The health sector is struggling to bring change by exerting its effort on these constraints/determinants of IDS utilization from the client and service coverage perspective but the level of professional commitment and associated factors of health professionals' was not studied yet.

**Objective:** To assess the level of professional commitment of health professionals' and associated factors in government health facilities of Jimma zone, Oromia, Southwest Ethiopia, 2016.

**Methods:** A facility based cross-sectional study design employing both quantitative and qualitative methods was conducted from March 01-20, 2016. A sample of 442 health professionals were included from the randomly selected 7 Woredas and Jimma town within respective 47 health facilities that fulfill inclusion criteria, and 20 health managers were selected purposively from selected health facilities, woreda health offices and zonal health department for in-depth interview. All eligible health professionals from the health facilities were requested to fill self-administered questioner. Finally, after checking its completeness, the data was entered in to EPI data version 3.1 and exported to SPSS version 20 for statistical analysis. Factor analysis was conducted to identify the measurement scales and factor scores that were used in both simple ( $P < 0.25$ ) and multiple linear regressions ( $P < 0.05$ ). Finally, the finding was presented using graphs, tables, narratives and descriptive numerical summary. Qualitative data was collected using key-informant interviews to support the findings from the quantitative survey by thematic analysis technique.

**Results:** The response rate of this study was 93.21%. The percentage mean score of professional commitment for health professionals working in government health facilities of Jimma zone was 72.71 % (SD21.88). The raw mean score of this scale was  $39.08 \pm 8.8$  with a total rotated variance explained 61.22%. The percentages mean score for perceived maternal health goal scale was 68.37% with the total variance explained 69.68%. This study found that perceived staff interaction, perceived work-life balance, affective organizational commitment, normative organizational commitment, personal characteristics and perceived maternal health goal as independent predictors of professional commitment.

**Conclusion:** In this investigation, the percentage mean score of professional commitment of health professionals working in government health facilities of Jimma zone was medium. Hence, we recommend health managers to communicate and update the new maternal health goal (SDG) as well as Professionals' should be committed to their organization and consider their personal characteristics having balanced worklife time to foster a more high level of professional commitment among health professionals in government health facilities of Jimma zone to increase uptake of institutional delivery services.

Key words; professional commitment, health professionals, government health facilities, IDS uptake

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## Table of content

| <b>Contents</b>   | <b>page</b> |
|---|-------------|
| Abstract .....  | iii         |
| Acknowledgment .....  | iv          |
| Table of content .....  | v           |
| List of figures and tables .....  | viii        |
| Abbreviations.....  | xi          |
| Chapter One: Introduction .....   | 1           |
| 1.1. Background .....   | 1           |
| 1.2. Statement of the problem .....   | 4           |
| 1.3. Significance of the study.....   | 5           |
| Chapter Two: Literature Review .....  | 6           |
| 2.1. Overview of literature review .....  | 6           |
| 2.2. Associated factors of professional commitment.....                             | 7           |
| 2.2.1. Socio-demographic and economic characterstics.....                           | 9           |
| 2.2.2. Perceived organizational support related factors.....                        | 10          |
| 2.2.3. Components of job satisfaction related factors.....                          | 10          |
| 2.2.4. Perceived personal characterstics related factors .....                      | 12          |
| 2.2.5. Institutional delivery service and organizational goal related factors ..... | 13          |
| 2.3. Conceptual framework of Professional commitment and associated factors .....   | 14          |
| Chapter Three: Objectives of the Study.....   | 15          |
| 3.1. General objective .....  | 15          |
| 3.2. Specific objectives .....  | 15          |
| Chapter Four: Methods and Participants.....   | 16          |
| 4.1. Study area and period.....   | 16          |
| 4.2. Study design.....  | 16          |
| 4.3. Population .....   | 16          |
| 4.3.1. Source population .....  | 16          |
| 4.3.2. Study population.....  | 16          |
| 4.3.3. Eligibility criteria.....  | 16          |
| 4.3.3.1. Inclusion criteria .....   | 16          |

|  |    |
|--|----|
| 4.3.3.2. Exclusion criteria .....  | 17 |
| 4.4. Sample size and sampling procedure .....                            | 17 |
| 4.4.1. Sample size determination.....                                    | 17 |
| 4.4.2. Sampling procedures .....   | 17 |
| 4.5. Study variables.....  | 19 |
| 4.5.1. Dependent Variable .....  | 19 |
| 4.5.2. Independent variables .....                                       | 19 |
| 4.6. Data collection tools and procedures .....                          | 20 |
| 4.6.1. Development of data collection tools .....                        | 20 |
| 4.6.2. Data collectors and supervisors .....                             | 21 |
| 4.6.3. Data collection technique .....                                   | 21 |
| 4.7. Operational definitions and measurement .....                       | 21 |
| 4.8. Data processing and analysis .....                                  | 28 |
| 4.9. Data quality management .....                                       | 29 |
| 4.10. Ethical consideration.....   | 30 |
| 4.11. Dissemination of the result .....                                  | 30 |
| Chapter Five: Results.....   | 30 |
| 5.1 Socio-demographic and Economic Characteristics.....                  | 32 |
| 5.2 Level of professional commitment .....                               | 35 |
| 5.3. Level of perceived organizational support.....                      | 36 |
| 5.4. Level of perceived job satisfaction .....                           | 36 |
| 5.5. Level of organizational commitment.....                             | 37 |
| 5.6. Level of perceived personal characteristics .....                   | 38 |
| 5.7. Level of perception on institutional delivery services uptake ..... | 38 |
| 5.8 Predictors of professional commitment .....                          | 39 |
| 5.8.1 Socio-demographic characteristics predictors .....                 | 39 |
| 5.8.2 Perceived organizational support predictors.....                   | 40 |
| 5.8.3 Job satisfaction predictors .....                                  | 41 |
| 5.8.4 Organizational commitment predictors .....                         | 42 |
| 5.8.5 Perceived personal characteristics and IDS uptake predictors ..... | 43 |
| 5.8.6 Independent predictors of professional commitment .....            | 43 |

|  |    |
|--|----|
| Chapter Six: Discussion.....   | 49 |
| 6.1. Professional Commitment.....  | 49 |
| 6.2. Predictors of professional commitment .....                               | 50 |
| 6.3. Limitations of the study.....   | 52 |
| Chapter Seven: Conclusion and Recommendation.....                              | 53 |
| 7.1 Conclusions.....   | 53 |
| 7.2 Recommendations.....   | 54 |
| References.....  | 56 |
| Annexes.....   | 59 |
| Annex I: Information Sheet, Instruction and Consent Form.....                  | 59 |
| Annex II: Data collection tool/ questionnaire.....                             | 60 |
| Annex III: Data collection tool/ In-depth interview guide.....                 | 66 |
| Annex IV: Item/factor loadings of the tools used in this study .....           | 76 |
| Annex VI: List of selected Woredas, Health centers and map of study area ..... | 83 |

## List of figures and tables

|  |    |
|--|----|
| <b>Fig 1:</b> Conceptual framework of professional commitment and influencing factors, Jimma Zone, 2016.....   | 16 |
| <b>Fig 2:</b> Schematic diagram of sampling procedure of the study, Jimma Zone, 2016.....  | 20 |
| <b>Fig 3-</b> Net salary of the study participants, Jimma Zone, 2016.....  | 32 |
| <b>Fig 4-</b> Professional commitment means scores difference between qualifications (diploma and postgraduate) and professions (Nurse, Medical laboratory and ESO), Jimma Zone, 2016.....           | 38 |
| <b>Fig 5-</b> Map of Jimma Zone (study area) and selected woredas for the study.....   | 84 |
| <b>Table 1-</b> Socio-demographic and economic Characteristics of health professionals, Jimma Zone, Oromia regional state, Southwest Ethiopia, 2016(n=412).....                                      | 33 |
| <b>Table 2-</b> Mean score for professional commitment of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....   | 34 |
| <b>Table 3-</b> Mean score for perceived organizational support of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....                                    | 35 |
| <b>Table 4-</b> Mean score for perceived job satisfaction of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....  | 37 |
| <b>Table 5-</b> Mean score for organizational commitment of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....   | 37 |
| <b>Table 6-</b> Mean score for perceived personal characteristics of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....                                  | 38 |
| <b>Table 7-</b> Mean score for perceived personal characteristics of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....                                  | 38 |
| <b>Table 8-</b> Socio-demographic and economic related predictors of professional commitment of health professionals,Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....        | 39 |
| <b>Table 9-</b> Perceived organizational support related predictors of professional commitment of health professionals,Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....      | 41 |
| <b>Table 10-</b> Perceived job satisfaction related predictors of professional commitment of health professionals,Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....           | 42 |
| <b>Table 11-</b> Organizational commitment related predictors of professional commitment amongst health professionals,Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412).....       | 42 |
| <b>Table 12-</b> Personal characteristics and IDS uptake related predictors of professional commitment amongst health professionals,Jimma Zone, government facilities, SW Ethiopia, 2016 (n=412).... | 43 |
| <b>Table 13-</b> Independent predictors of professional commitment of health professionals, Jimma Zone, government facilities, SW Ethiopia, 2016 (n=412).....  | 47 |
| <b>Table 1-6,</b> Items on to factors loading of the tools used in this study, Jimma Zone, 2016.....   | 75 |
| <b>Table 7-</b> Frequency distribution of five point Likert scale response of participants for professional commitment measuring items, Jimma zone,2016(n=412).....                                  | 81 |



## Abbreviations

|        |   |   |
|--------|---|---|
| ANC    | - | Antinatal Care                                  |
| AOC    | - | Affective Organizational Commitment             |
| BSc    | - | Bachelor Science                                |
| COC    | - | Continuance Organization Commitment             |
| EDHS   | - | Ethiopian Demographic and Health Survey         |
| EFY    | - | Ethiopian Fisical Year                          |
| EmOC-  |   | Emergency Obstetric Care                        |
| FGD    | - | Focus Group Discussion                          |
| HC     | - | Health Center                                   |
| HEW    | - | Health Extension Worker                         |
| HP     | - | Health Post                                     |
| HPCS   | - | Health Professionals' Commitment Score          |
| HPs    | - | Health Professionals'                           |
| HRH    | - | Human Resource for Health                       |
| IDS    | - | Institutional Delivery Service                  |
| MDG    | - | Millenium Development Goal                      |
| MH     | - | Maternal Health                                 |
| MOH    | - | Ministry Of Health                              |
| NOC    | - | Normative Organization Commitment               |
| PI     | - | Principal Investigator                          |
| R      | - | Reversely coded items                           |
| SBA    | - | Skilled Birth Attendant                         |
| %SM    | - | Percentage of Maximum Possible Scale mean Score |
| SRS    | - | Simple Random Sampling                          |
| UNFPA- |   | United Nation for Population Agency             |
| VIF    | - | Variance Inflation Factor                       |
| WHO    | - | World Health Organization                       |
| ZHD    | - | Zonal Health Department                         |

## Chapter One: Introduction

### 1.1. Background

Commitment is a willingness to give time and energy to something that believed in, or a promised or firm decision to do something and an act of binding oneself intellectually or emotionally to a course of action and the official act of consigning a person to confinement as in a prison or mental hospital. It is a strong belief that something is good and that should be supported and determination to work hard at it, a duty or responsibility that have accepted and quality of dedication, loyalty, devotion, adherence, responsibility, tie, duty, obligation, liability, engagement, pledge, promise, guarantee & undertaking a course of action (1).

Work or occupational commitment is “a force that binds an individual to a course of action of relevance to one or more targets”. Employees are theorized to experience this force in the form of three bases, or mindsets: affective, normative, and continuance, which reflect emotional ties, perceived obligation, and perceived sunk costs in relation to a target, respectively (2). Thus, any scale that purports to measure professionals’ commitment should tap one of these mindsets and should reference the target, what the employee is committed to, be it the organization, profession, a team, a change initiative, a goal which can be to the maternal health services goal (IDS) in this case. Professional commitment is in relation to the job profile and satisfaction in the society (3).

Health professionals’ commitment to the profession rather than organizations could affect their behaviors. Shared values, vocational commitment, patient care, leadership, teamwork, and support, training, development and career progression are the drivers of commitment amongst health professionals (4). Finding of a study about the professional commitment of public health nurses in Taiwan revealed that nursing administrators have an important role in enhancing the commitment of nurses. Studies have shown that there is a relationship between professional commitment and organizational commitment which is based on a framework that was designed to measure by three different types of commitment: (a) *Affective commitment* refers to employees’ emotional attachment, identification with, and involvement in the organization. (b) *Continuance commitment* refers to employees’ assessment of whether the costs of leaving the organization are greater than the costs of staying. (c) *Normative commitment* refers to employees’ feelings of obligation to the organization (5). In arguing for this framework, the authors contended that affective, continuance,

and normative commitments were components rather than types because employees could have varying degrees of all the three (6).

Due to close meaning of the professional commitment and organizational commitment, a distinction between each of these concepts is required. Organizational commitment means that the individuals should regard the organizational goals as their own goals, hope to stay in the organization, and assume the organization as their identifier. Professional commitment is beyond a commitment for a particular organization and implies the individuals' perspective toward their profession and the motivation that they have to stay in their job. Once people try to promote their profession, they have professional commitment whether along with organizational commitment or not. Although some researchers reported professional commitment as a counterpart for organizational commitment, some believe that these two commitments are aligned in one direction (3). Achieving an elevated level of employee organizational and professional commitment is considered as one of the main goals of human resources management in many companies including those in the health sector. Indeed, there is a general conviction that professional commitment has a positive impact upon business performance of an organization (7).

Health professionals' commitment can be explained by adherence to principles of ethical practice, effective interactions with patients and with people who are important to those patients, effective interactions with other people working in the healthcare system, reliability, competence, knowledge, commitment to autonomous maintenance and continuous improvement of competence, pride in profession, appearance, flexibility and good behavior outside work. Professional commitment is a more stable type of work commitment or occupational commitment feelings about a job or organization. Personal background, organizational context, and socialization variables, organizational commitment and job satisfaction can affect professional commitment. Professional commitment refers to one's loyalty to the profession and the willingness to strive and uphold the values and goals of the profession and a willingness to maintain membership in the profession. A professional like doctor may do well to provide health care for the sake of professional commitment alone beyond or without organizational commitment (6, 8, 9).

The professional commitment of the doctors and the State health officials was found to be higher than organizational commitment. The higher commitment to their profession drives doctors to execute their professional responsibilities even if their commitment to their organization is lower.

The affective professional commitment for health officials in Gujarat, India is 3.61, and normative commitment (3.54) indicate that district health officials share fairly strong emotional bond with their department. The results showed that none of the commitment variable differed across groups (top and middle level health officials), suggesting no marked difference across groups (9).

Studies revealed that factors might affect professional commitment could be role status, salary levels, degree of autonomy over work, whether or not supervisory duties are involved in work roles, and the level of exposure to on-going training and staff development opportunities, institutional security status and levels of stress in the work environment, staff demographic characteristics (age, gender, and educational achievement, seniority, diversity of roles occupied, job history and career history), work values and attitudes toward the job, job and organizational climate perceptions, and personality variables (10,50).

Health professionals' commitment is an occupational or work commitment that belongs to the health workforce and expected from them as if assigned to the given services after taking the training based on the competences. Institutional delivery service is one of the essential maternal health services that is given at health facilities by trained and educated health professionals (midwives, medical doctors, emergency surgeon and obstetrician, health officers, nurses, etc) with proficiency in managing normal and complicated pregnancy during child birth, with enabling environment where the equipment, drugs and other supplies required for effective and efficient management of obstetric complications are available (11, 12). IDS utilization coverage is increasing globally including Africa but the progress is very low in sub-saharan Africa including Ethiopia. Even if there is increment in Ethiopia, yet it's the lowest coverage in terms of MDG 5 goal (12). Skilled attendance during delivery can only be provided in the presence of functioning health systems which include adequately trained, motivated and committed workers and well equipped facilities, transportation and rapid referral systems in place (11, 12). However, there is no current study done on the level of health professionals' commitment and influencing factors to increase the uptake of IDS as per the plan.

## **1.2. Statement of the Problem**

In Ethiopia, ANC coverage is found to be in good status (nationally; 41%, Oromia; 58% and Jimma zone; 78% of women received the service from skilled provider). However, the Institutional delivery service (IDS) coverage was still low (national; 16% and Oromia; 13%, Jimma zone; 42%). Researchers identified determinants to low uptake of IDS, and the health sector also struggling to increase the uptake by exerting its effort on these constraints/determinants of IDS utilization (12, 61) but yet it is low.

The quality and effectiveness of health systems critically depends on the size, skills and commitment of the health workforce. So professional commitment has a strong association with employee retention and job performance in health professions (13). For the organization, the rewards of commitment can mean increased employee tenure, limited turnover and reduced costs. In addition, it enhances greater employee job satisfaction, acceptance of organization's demands, and the meeting of organizational goals (14). Further, there is an improvement in customer satisfaction because long-tenure employees have better knowledge of work practices, and customers like the familiarity of doing business with the same employees (15).

Professional commitment has role in an improvement in customer satisfaction. In Ethiopia health service organization and its' management are decentralized, but there are many challenges like shortage of health professionals in different disciplines at all levels. Low density and low training output for key HRH categories, poor HRH management, high attrition rates, and massive geographic imbalances are some of the problems in health sector (16).

In Ethiopia, Job turnover is typically high early in one's career. About 52% of the nurses and 60% of the doctors were stated that they planned to migrate abroad in the year 2009. Those health care workers were serious about their intention to migrate and to change their professions that need investigation on level of professional commitment. This is clear from the fact that more than 80% of them have applied for a lottery visa, or DV, which would allow them to leave the country. The main causes for attrition were low salary followed by lack of educational opportunity, poor career structure and other benefits for specific profession (16,17).

There is lack of research in Ethiopia related to health professionals' commitment and its predictors to improve maternal health services, especially IDS uptake to reduce maternal and neonatal morbidity and mortality since it was non-investigated perspective yet.

### **1.3. Significance of the Study**

Identifying the level of health professionals' commitment and associated factors is important to reinforce the need and for better future intervention that will provide new insight in solving professional commitment related problem. Specifically, may serve for any possible interventions aimed at improving the institutional delivery services utilization. This research may be useful to policymakers and planners providing information that can be used to benchmark and/or evaluate advocacy efforts to advance reforms in the health sector human resource department; furthermore, the results can help identify specific strategies that can be employed to move the institutional delivery service improvement agenda forward. In line with outcome identification, it is equally important to identify determinants/ factors affecting level of commitment to guide policy makers to develop intervention that are factor specific(planning staff development programs) to increase uptake of IDS. The community will be benefited if evidence based service is given. No similar study done at the facility level as far as investigators knowledge so that will be used as a baseline information by contributing to the scientific community through better understanding of the relationship between professional commitment and it's precedents among government health professionals in Ethiopia. This study might offer health managers insight into strategies to improve health care work staff retention and increase their job satisfaction, professional commitment and in turn their job performance. It may bring points of discussion and protocol revision among facilities and administrative bodies of different primary hospitals and health centers. This study will be an important also for: Health managers in the study area, health policy makers, and for further researchers.

## Chapter Two: Literature Review

### 2.1. Overview of literature review

Literatures define the term professional commitment (health) in different ways but the meaning is almost similar. The term commitment can be explained in many ways. professional commitment describes the concept of commitment as, “consistent lines of activity.” It acts as a psychological bond to the profession that influences individuals to act in ways consistent with the professional and organizational interests (8, 18). Professional commitment refers to one’s loyalty to the profession and the willingness to strive and uphold the values and goals of the profession and a willingness to maintain membership in the profession. Health professionals’ commitment can be explained by adherence to principles of ethical practice. Professional commitment is a more stable type of work commitment or occupational commitment feelings about a job or organization (6, 8).

Several alternative models of commitment were proposed in the 1980s and early 1990s. The model developed by Meyer and Allen has gained substantial popularity. According to this model, organizational and professional commitment can be conceptualized as consisting of three components: affective, continuance and normative (19). The model explains that commitment to an organization or at large to the profession is a psychological state, and that it has three distinct components that affect how employees feel about the organization that they work for and for their profession; affection for job ("affective commitment"), fear of loss ("continuance commitment") and sense of obligation to stay ("normative commitment").

The affective component (AC) means the attachment, identification and involvement in the organization and/or to their profession (5). AC is adoption of organizational goals and commitment to them and to have positive emotions related to identification with it (19, 34). In emotional commitment, workers show active and voluntary participation in line with organizational objectives and desire to be continuous (20). Affection for the job occurs when the individual feel a strong emotional attachment to their profession, and to the work that they do.

Continuance component (CC) refers to the perceptions of an employee about costs related with the leaving an organization or profession. These costs can either be work-related for example, wasted time and effort acquiring non-transferable skills or non-work-related for example, relocation costs (21, 34). Employees believe that they will lose material and spiritual satisfaction elements such as their status, salary and authority with the departure of the organization. This type of commitment

occurs when the worker weigh up the pros and cons of leaving the organization. These perceived losses can be monetary (they had lose salary and benefits); professional (they might lose seniority or role-related skills that you've spent years acquiring); or social (they may lose friendships or allies). The severity of these "losses" often increases with age and experience (22).

Normative component (NC) of commitment occurs when workers feel a sense of obligation to their organization or to their profession, even if they are unhappy in their role, or even if they want to pursue better opportunities. They will feel that they should stay with their organization or profession, because it's the right thing to do. This sense of obligation can stem from several factors. They might feel that they should remain within the organization because it has invested in many ways (19). These three types of commitment are not mutually exclusive. Professionals can experience all three, or two of the three, in varying degrees (23).

## **2.2. Associated factors of professional commitment**

Socio-demographic & economic characteristics (age, gender, marital status, qualification ,work experience, profession , working facility, type of position , area of residence , net monthly salary ), and organizational commitment (AC,CC,NC) related variables were factors. Perceived organizational support (perceived concern for employee, perceived value and care for employee, perceived organizational culture , perceived work life balance, Perceived working env't & location factors, perceived HR policy and practice, perceived compensation & benefit package) and components of job satisfaction (perceived leadership style and professional training, perceived resource/input availability and work setting, perceived reward and promotion opportunity, perceived remuneration, perceived staff interaction) were also associated factors. Perceived personal related factors(perceived punctuality, perceived skill & motivation, perceived substance use , perceived occupational stress , perceived work load , absenteeism at working time , responsiveness, accountability & responsibility (24,25,26,27)) are all factors influencing professional commitment. Literatures relevant to professional commitment indicated a number of variables that determine level of commitment are stated in different sections specifically.

Professional commitment is a person's involvement, pledge, promise or resolution towards his/her profession. Commitment to the form of employment explains variance of organizational outcomes over and above organizational commitment (6). Fang's study of Singaporean nurses demonstrated that job satisfaction was significantly and positively related to professional commitment.



Professional commitment is positively related to the job satisfaction of nurses. Overall job attitude was defined as job satisfaction and organizational commitment that affect professionals' commitment. Lu, Chiou, Chang discovered that the scores of overall professional commitment decreased from nursing students to registered nurses significantly (29) as well as their organizational commitment (affective, continuance & normative) too. According to research done on health care sector in Iran significant differences were obtained on professional commitment between age, tenure, organizational position, type of employment, received salaries (30).

In order to further explore the multidimensional nature of professional commitment, this study will treat organizational commitment as an independent variable that can influence the outcome variable and other factors such as job satisfaction, leadership style of one's supervisor, perceived organizational support and non-organizational factors like availability of alternatives (4,31). Commitment on the job and to the profession can be showed by experiencing professionalism, putting customers first, teamwork and strong motivation (32).

According to a facility based cross sectional study done in Gujarat/India by Sunil Maheshwari et al/2008, Professional commitment of doctors (mean score of 3.21 to 4.01) was found to be higher than their commitment to the organization (3.01 to 3.61) indicating their higher identification with the profession than organization. Doctors did not perceive greater fairness in the system on promotion (on the scale of 5, score: 2.55) and were of the view that the system still followed seniority based promotion (score: 3.42). Medical officers were upset about low autonomy in the department with regard to reward and recognition, accounting procedure, prioritization and synchronization of health program and other administrative activities. An affective organizational commitment score of 3.61 clearly suggested the need to make effort on improving the factors affecting organizational commitment that inturn affect professional commitment. But the regression results indicated that the HR policy and practices had no major influence on professional commitment. However, good relations with superiors, clarity on job objectives, and autonomy on work could help in delivering responsibilities professionally. Since HR practices do not exert large influence on professional commitment, higher professional commitment could be the result of good professional skills of the majority of respondents (Most of the senior doctors were postgraduates with specializations in different fields) (9).

Most respondents reported a high-level of professional commitment (n=440, 85.9%-maximum scale mean score). The majority of respondents reported that they never or seldom: tried to hide belonging to their profession (n=466, 91.0%), were annoyed to say that they were members of that profession (n=416, 81.3%) or criticized the profession (n=398, 77.8%). However, only one-third reported that they were glad to belong to their profession often or very often (n=167, 32.6%). Nurses with a bachelor degree (mean rank=204.30) reported a lower level of professional commitment (w=8.323, p<0.05) compared to those with diploma (mean rank=270.33). In contrast, diploma nurses (mean rank=268.27) were more likely to be glad to belong to the profession (w=7.765, p<0.05) than bachelor degree nurses (mean rank=206.69). There were no other significant differences relating to other items of professional commitment across qualifications (p<0.05) (9, 14).

According to the study done by Barbara B. Brownat in Virginia/ 2003, Almost two-thirds of respondents reported a high-level of organizational commitment (n=326, 63.7%). More than two-thirds of the sample agreed or strongly agreed that they really cared about the fate of their current hospitals (n=369, 72.1%) and reported that they were willing to put in a great deal of effort beyond that normally expected in order to help their hospitals be successful (n=366, 71.5%). Many factors influence employee commitment. These include commitment to the manager, occupation, profession, organization, goal or career. (2)

There is strong relationships between professional commitment and both job satisfaction and job turnover, and a relationship between organizational commitment and rates of absenteeism. Hence, the available research suggests that employees who exhibit organizational commitment are: happier at their work; spend less time away from their jobs and are less likely to leave the organization (33).

### **2.2.1. Socio-Demographic & Economic Characteristics**

According to the longitudinal study done, Norwegian Social Research (NOVA), Oslo, Norway, May/2011, results showed, factors known to be related to professional commitment are socio-economic background, education, amount of salary, work experiences, working facility, age, gender, type of profession, mental health(substance abuse) and family characteristics (P<0.05) (28). According to the study done in Gujarat/India in 2008, on 424 nurses and doctors using facility based cross-sectional study; the level of health professionals' commitment score is different across different types of professions and qualification, work experiences and within other variables (9)

### **2.2.2. Perceived Organizational Support Related Factors**

Organizational culture is concerned with how employees perceive the characteristics of an organization's culture, not with whether or not they like them. Researchers found that strength of organizational culture (perceived concern for employee, perceived value and care for employee) predicted job satisfaction well and positively (34).

The literature review revealed that aged care nurses perceived as they were not appreciated and were treated differently than other health care professionals. Nurses are receiving almost no attention and no effort was made to make them feel as if they were important parts of the building organization and management team. These feelings led to problems that caused low morale, lack of job satisfaction and the perception of very little or no organizational support. This perception could contribute to a lack of organizational commitment that affect professionals' commitment. The way in which tasks or the work context were organized, the structure of the organization and the management hierarchy, together with low levels of employee responsibility, job satisfaction, morale, leadership style, motivation and perceived organization support, have all been associated with employee absenteeism and low commitment (35). A study was conducted by Wu and Norman (2005/China) on 75 nurses, found a positive correlation between job satisfaction and professional commitment ( $r = .464$ ,  $P < .01$ ) indicating that nurses who were more satisfied with nursing profession as a job were also more committed to the health care service. The multiple regression performed in this study indicated 91% of the variance in professional commitment was accounted by the linear combinations of job satisfaction, organizational support, transformational leadership behavior and level of education. Job satisfaction was determined to be the strongest predictor of the four variables and transformational leadership behavior was the weakest predictor of professional commitment. Employees who experience a strong level of perceived organizational support (POS) feel the need to reciprocate favorable organizational treatment with attitudes and behaviors that in turn benefit the organization (36). Over all, it appears that health professionals with higher levels of POS are more likely to be committed than those who perceive that the organization does not value them and cares about their well-being as high (37-39).

### **2.2.3. Components of Job Satisfaction Related Factors**

Job satisfaction is defined as all the feelings that an individual has about his/her job. Researchers have attempted to identify the various components of job satisfaction, measure the relative

importance of each component of job satisfaction and examine what effects these components have on workers' productivity. A range of findings derived from quantitative as well as qualitative studies has been reported in the literature regarding sources of job satisfaction among nurses. These sources include working conditions, interactions with patients/co-workers/managers, work itself, remuneration, self-growth and promotion, praise and recognition, control and responsibility, job security and leadership styles and organizational policies (40)

Occupational stress has also been found to be a major factor related to the job satisfaction of nurses as well as role conflict and role ambiguity. Regarding overall job satisfaction, more than half of respondents were satisfied (n=275, 53.7%). Almost three quarters of the sample felt dissatisfied or very dissatisfied with the rate of pay for nurses (n=373,72.9%). Although nurses with a bachelor degree (mean Rank=234.92) reported a lower level of job satisfaction compared to those with diploma (mean rank=257.68), there was no significant difference in total job satisfaction of respondents across different qualifications ( $p < 0.05$ ) (41).

In fact, people who have higher job satisfaction are more loyal to their employer and like their job more. Therefore, they can satisfy their needs and have positive feelings towards it (42). According to Locke, job satisfaction is a pleasurable or positive emotional feeling resulting from one's evaluation towards his/her job when comparing between what he/she expects and what he/she actually gains from his/her job (35, 43). Also job satisfaction is considered as a result of the interaction of the employee and his/her perceptions towards his/her job and work environment (44). In general, successful organizations have more satisfied employees, while low job satisfaction seriously affects the organization and professional commitment of staffs (45).

Factors that affect job satisfaction of health professionals as mentioned in many literatures includes amount of pay, the availability of necessary equipment and consumables to ensure proper patient care, style of communication channels in different organizational units and between workers and management. Autonomy, work-life balance, participation in decision-making processes, and Concern for employee welfare by the health facilities management were additional factors affecting job satisfaction of health professionals (30, 46-50).

Several studies have also demonstrated that if employees are highly satisfied with their work, coworkers, pay, supervision and derive high level of job satisfaction, they will be more likely to be committed to the organization and profession than if they are not satisfied (51, 24, 25, 52). The

reason why satisfaction leads to commitment is that a higher level of job satisfaction may lead to good work life and reduction in stress (29). The focus on these two key concepts is, if employees are satisfied with leadership style and other components they will be more committed and in turn, increase their performance, and productivity (53). For the organization, job satisfaction of its workers means a work force that is motivated and committed to high quality performance (54). Organizational commitment and job satisfaction are job related attitudes that have received considerable attention from researchers around the globe. This is because committed and satisfied employees are normally high performers that contribute towards organizational productivity. So training, career structure and leader behaviors are important to create a feeling of belonging in the employee that love their profession and organization. A study done among hospital nurses in Malaysia found no relationship between the perceived level of pays and benefits with professional commitment (55-57, 58).

According to a study conducted among nurse in state hospitals of Malaysia professional status, autonomy, interaction, task requirement and years of experience could predict professional commitment. The result of research done on nurses in Saud Arabia where the professional commitments mean score of nurses was 57.43% and it was 55.15% among health workers in Nigeria, but the result of research done on nurses in Taiwan in which the professional commitment mean score was 67% (66-70).

#### **2.2.4. Personal Characteristics Related Factors**

According to the study done by Hong Lu...et al,2006, two-thirds of respondents reported experiencing light to moderate stress at work (n=311, 60.8%). Scores of moderate to extreme stress reported by respondents related to workload (n=398, 77.8%) and involvement with life and death situations (n=276, 53.9%). There were no significant differences in total occupational stress across educational program ( $p>0.05$ ) (40).

According to the qualitative study done in Iran on health professionals by Fateme J.et al in 2013, Work overload and stress sometimes had terrible consequences: *“Both work overload and stress in this job were the main causes of my fetus death. I think that I am experiencing depression. How I could be committed to this profession.”* respondent said. The results of the study revealed that challenging with different feelings (life and death situation) and role of the manager are the most important factors in development of professional commitment. Other factors were organizational

structure and culture, financial security, accountability & responsibility, punctuality & non-absenteeism and social factors. (3)

According to the longitudinal study done Norwegian Social Research (NOVA), Oslo, Norway, May/2011, the level of work commitment was associated with involvement with substance use like cannabis. When the respondents were in their mid-20s, those who were involved or had experimented with cannabis displayed lower levels of work commitment than those who were abstaining or merely exposed to cannabis through friends ( $P < 0.05$ ) (28).

### **2.2.5. Institutional Delivery Service and Goal uptake Related Factors**

According to the study done by Mohamud Al. et al, 2011 and Archdeacon, T. (1994) on Predictors of nurses' commitment to their profession and organization, the majority of respondents reported a low-level of role conflict and role ambiguity due to shared vision about the goal they had. Majority of them reported that they knew often or very often what their responsibilities were ( $n=447$ , 87.3%). Around three-quarters of respondents reported feeling certain about how much authority they had and felt that they had clear, planned goals and objectives for their jobs ( $n=391$ , 76.4%;  $n=374$ , 73.1%, respectively) (60).

A qualitative study done in Iran /2011 revealed that Relationship-based valuing and respecting rules could have association with increased commitment in nurses. The participants named factors such as being supported, respected and recognized as facilitators for the development of professional commitment: *"They named me as a competent nurse and selected me to be awarded. You see, after that, I thought I had to be more committed; it was a good feedback for me"*. Participants mentioned experience of being suppressed: *"They (managers) left no chance for me to show my ability, my knowledge. They suppress my confidence"*. In addition, another nurse said, *"They (managers) try to suppress me because they think I can occupy their positions"*. This approach has led nurses to frustration, disaffection and finally leaving the profession: *"How I can be committed when I feel that they do not understand my work's value?"* in this case the service delivery/provision affected (3).

### 2.3. Conceptual framework of HPs' commitment and associated factors



Fig.1 Conceptual framework of health professionals' commitment to their profession and influencing factors, Jimma Zone, 2016 (Developed after reviewing relevant literatures (2, 3, 33, 37, 58))

## **Chapter Three: Objectives of the Study**

### **3.1. General objective**

- To assess the level of professional commitment of health professionals' and associated factors in government health facilities of Jimma zone, Oromia, Southwest Ethiopia, from March 1-20/2016.

### **3.2. Specific objectives**

- ✓ To determine level of professional commitment of health professionals
- ✓ To identify predictors of professional commitment of health professionals



## **Chapter Four: Methods and Participants**

### **4.1. Study area and period**

The study was conducted in government health facilities of Jimma Zone, Oromia Regional State, southwest Ethiopia from March 01-20/2016. Based on the 2007 Census, the total projected population of the zone is 3,090,112 of which 89.69% are rural inhabitants. The zone is divided into 18 woredas (districts) and one town administration (directly accountable to regional administrative office-Regional Health Bureau) with a total of 545 Kebeles (the smallest administrative unit) among which 505 are rural. The zone has 4 primary hospitals, 114 health centers (96 are functional from which 82 were started functioning before 6 months) and 459 health posts. There is a zonal health department located in the capital of the zone, Jimma town, and there are 18 woreda and 1 town health offices which are responsible for managing health activities in the zone. A total of 1493 health professionals that are relevant for this study are working in the government health facilities of Jimma zone (61).

### **4.2. Study design**

A facility based cross sectional study design employing both quantitative and qualitative methods was used.

### **4.3. Population**

#### **4.3.1. Source population**

The source population was all health professionals working in government health facilities and health managers in Jimma zone and Jimma town administration.

#### **4.3.2. Study population**

The study populations were all health professionals working in randomly selected woredas and respective public health facilities and purposively selected key informants (health managers at different level) in Jimma zone and Jimma town administration.

#### **4.3.3. Eligibility criteria**

##### **4.3.3.1. Inclusion criteria**

All health professionals who have been employed in the health system for at least 6 months and directly involved in the care of pregnant women and institutional delivery service provision were included in the study with a minimum qualification of diploma.

#### **4.3.3.2. Exclusion criteria**

All health professionals who are not directly involved in the care of pregnant women and institutional delivery service provision such as environmental health professionals, dentists, physiotherapists...etc were not included in the study.

### **4.4. Sample size and sampling procedure**

#### **4.4.1. Sample size determination**

For quantitative data, a sample size of 423 was calculated by a single population proportion formula, taking  $P = 50\%$  (since there is no previous study done on outcome variable), and expected none response rate of 10% added.

$$n = Z^2 p (1-p) / d^2$$

$$n = 1.96^2 (0.5)(0.5) / 0.05^2$$

$$n = 384$$

Assumption:

- ✓  $P$  = Estimated percentage mean score (%SM) of professional commitment (50%)
- ✓  $d$  = Marginal error/degree of precision = 5% (0.05)
- ✓  $\alpha$  = Critical value at 95% CI of certainty (1.96)
- ✓  $Z$  = Reliability coefficient
- ✓  $n$  = Sample size estimation of single population proportion

Finally by adding, expected non-response rate, 10% of 384=38.4, the required sample size =**423**

For qualitative data, 2 zonal health department managers, 6 woredas' health office managers, 4 chief clinical officer from the hospitals (Limu and Shenen gibe, Seka and Agaro hospitals) and 8 human resource managers and heads/leaders from health centers were interviewed using in-depth interview guide. Hence the total sample size for qualitative data in-depth interview was 20.

#### **4.4.2. Sampling technique and procedures**

For quantitative data, 30% of the woredas were selected using simple random sampling method from each category/stratum of woredas, which become seven woredas that are listed in Fig. 2, and 1 town administration, and 4 primary hospitals taken directly. Operationalized eligible health professionals' working in 43 HCs that are found in seven woredas and Jimma town, and at 4 primary hospitals (Shenen Gibe, Limu, Agaro, and Seka) were all included. There were 524 health professionals working in the selected facilities but eligible were only 442 who were subjected to complete the questioner.

For qualitative data, purposive sampling method was used to select those predetermined number (20) of health managers/study subjects.

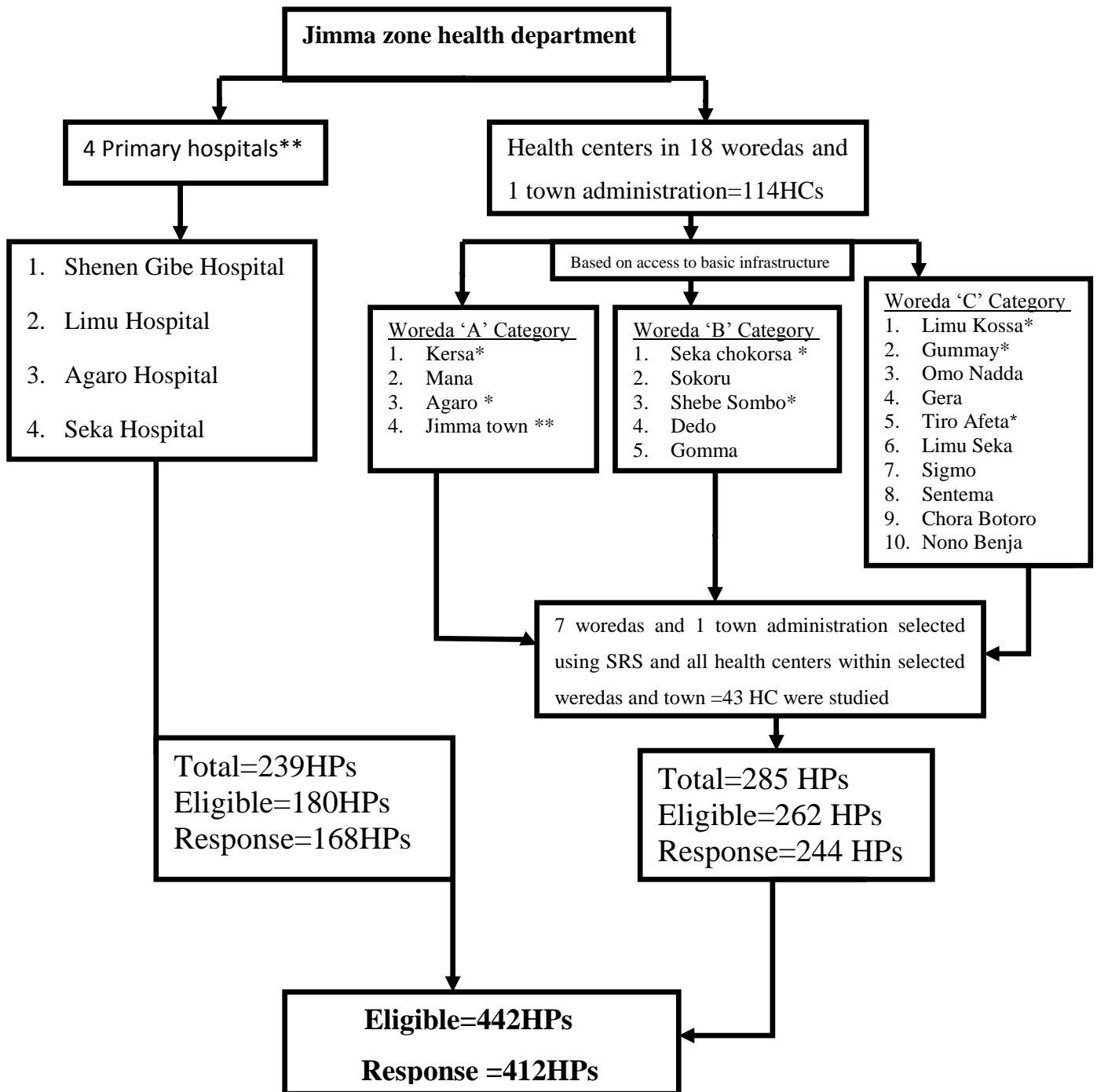


Fig. 1: Schematic diagram of sampling procedure of the study, Jimma Zone, 2016.  
 \*\* Directly taken health facilities, and \* 30% randomly selected woredas from each category  
 N.B: The name of each selected health centers (43) were listed in the annex part

## **4.5. Study variables**

### **4.5.1. Dependent Variable**

- Professional commitment score

### **4.5.2. Independent variables**

1. Socio-demographic and economic variables (age, gender, marital status, qualification, work experience, profession, working facility, type of post , area of residence/location of facility and net monthly salary)
2. Job satisfaction related variables
  - ✓ Perceived promotion opportunity
  - ✓ Perceived remuneration
  - ✓ Perceived staff interaction
  - ✓ Perceived leadership style and professional training
  - ✓ Perceived resource availability and work setting
3. Organizational support related variables
  - ✓ Perceived concern for employee
  - ✓ Perceived value and care for employee
  - ✓ Perceived work life balance
  - ✓ Perceived human resource policy and practice
  - ✓ Perceived compensation & benefit package
  - ✓ Perceived working env't & location factors
4. Personal characteristics related variables
  - ✓ Perceived punctuality, substance use, occupational stress, work load, responsibility, responsiveness, skill and motivation
5. IDS and Organizational goal related variables
  - ✓ Perceived ambitious maternal health goal, shared vision, objectives, home delivery free kebeles' motto, reasonable availability of feedback, teamwork, respecting rules
6. Organizational commitment variables
  - ✓ Perceived affection for job/affective, fear of loss/continuance, sense of obligation to stay/normative commitment

## 4.6. Data collection tools and procedures

### 4.6.1. Data collection tools

The quantitative data was collected using self-administered structured questionnaire that was adapted from different literatures based on the study objectives.

The tool contains six parts which has a total of 115 items. Part one was on Socio-demographic and economic data that comprised of 10 items. Part two with 23 items of 5-point Likert scale to measure job satisfaction with 5 sub-components (62). Part three contain 30 items of 5-point Likert scale to measure perceived organizational support with 6 sub-components (63). Part four comprised of 10 items with single component that measure professional commitment (58, 64) and with this part, organizational commitment was measured using 24 items by three components of commitment each containing 8 items (33). The response categories were 5-point Likert scales ranging from 1 strongly disagree to 5 strongly agree. Part five contain 10 items to measure personal characteristics related variables using 5-point Likert scale (40). Part six comprised of a total of 8 items to measure IDS & organizational goal related variables using 5-point Likert scale (3)

After conducting factor analysis, the name was given for each latent component (factor with Eigen value greater than one was extracted) and the items with scale of reliability coefficient (Cronbach's alpha) of greater than 0.70 was considered. Only items having a communality of  $>0.50$  on factor analysis were retained for further analysis. Any item that loaded on more than one factor (cross-loaded) was removed. After conducting factor analysis, emerged scales/latent variables as part of the tools, were reported under operational definition with the total variability explained and reliability coefficient. Factor loading of  $> 0.4$  each of the items are listed in *the annex part- IV (R= denoted reversely coded item)*

Interview guide was developed using 4 items that are open for further detail questioning (probe) in a manner that they addressed the perceptions of the health managers about the level, factors affecting and possible solutions to increase the health professionals' commitment towards increasing uptake of institutional delivery service. Starting Items like:- How do you rate the professional commitment of health workforce in your health facility/ woreda/zone health office? What factors do you think affect their commitment level towards increasing uptake of IDS? What do you suggest to improve the commitment level of health professionals in your health facility/ woreda/zone health office? In addition, is there anything else you would like to add? Were followed by probes that are listed in the annex part. For both tools, guideline was prepared for data collectors to assure that each health professional receives the same direction and information.

#### **4.6.2. Data collectors and supervisors**

Seven data collectors were recruited for quantitative self-administered questionnaire from each woredas and/or from some facilities who are HO and Nurses (Bsc) with or without experience in data collection, but fluent in Amharic, Oromiffa & English language. Five supervisors who are MPH holders with the previous experience of data collection or supervision of data collectors were recruited to oversee the data collection process. In-depth interview was conducted by 2 health education specialty students (MPH). Over all supervision was conducted by principal investigator after giving the training for all data collection team on their specific responsibility, overviews regarding professional commitment and its impact on uptake of institutional delivery service, on each part of the tool, ethical consideration and data integrity for one day.

#### **4.6.3. Data collection technique**

Quantitative data was collected using self-administered structured and pretested questionnaires. 21 participants of the pre-test were contacted to give their general feelings, comments and problems encountered while responding the questions. Finally, relevant modifications were made before the start of the actual data collection. The study population invited to participate voluntarily by explaining the rationale of the study at the time of data collection. Trained data collectors distributed the questionnaires to all eligible health professionals at the same time during the tea breaks or at the entry or exit times like early morning or lunch time after informing them to fill the questionnaires privately. Written guideline was given to the administrators of the questionnaire to assure that each health professional received the same direction and information.

In-depth interview was conducted for 45-60minutes with 20 key informants at different level after informing the rationale of the study privately by the PI and 2 health education specialty students (MPH) to get more accurate information that supplements the quantitative data. The place of interview was at the office. Each interview was tape-recorded and transcribed on the same day of the interview sessions. Written guideline was given to the data collectors to assure that each health professional receives the same direction and information. Both the PI and the trained supervisors were responsible for supportive supervision on the spot and checking questionnaire on daily basis.

#### **4.7. Operational definitions and measurement**

**1. Health professionals** refers to the study subjects who have direct involvement in the care of pregnant women and institutional delivery service provision such as medical doctors, nurses,

Midwives, health officers, emergency surgeon and obstetricians, Medical lab/technicians, Pharmacist/druggist, and anesthesia.

**2. Job satisfaction:** It is negative or positive/pleasurable emotional state resulting from the appraisal of one's job or job experience or the reverse. It was measured with five pre-assumed scales such as: perceived remuneration (It includes wage, benefits and incentives or other payments in the organization), perceived promotion opportunity (It denotes both career development and educational upgrading opportunity in once organization), perceived resource availability and work setting (refers to the situation in which the professionals work in and the presence of adequate supplies and time for each client), perceived leadership style and professional training (It represents the way how the organizations treat the health professionals and the presence of on job or off job training programs for the health professionals) and perceived staff interaction (It is formal/informal relationship that is warm or bad, that practiced between anyone in the organization). All of these scales were measured by 3, 3, 3, 9 and 3 items of 5-point Likert scale respectively in which 1 denoting very dissatisfied and 5 denoting very satisfied. Each score was created on a factor analysis and higher scores indicate higher job satisfaction.

After conducting factor analysis, the following scales emerged as part of the tools that measure **job satisfaction**: Five factors with Eigen value greater than one were extracted. These five factors explained 68.34% of the variability in job satisfaction among the respondents. The first factor had five items like; the physical conditions in which you work and supplies to your job, management involve staff in decision making, sufficient time you have for each clients, working environment encourage you to make adjustment in your professional practice to suit patient needs and atmosphere of co-operation between staff & management were loaded on to factor one. This factor was named as "***perceived working environment/work setting***".

The second factors has five items; like, sufficient opportunity you have for professional growth, with your job advantages rather than disadvantage, with your income as a reflection of the work you do, compensation you get for working weekends and existence of enough support for continuing education were loaded on to factor two and it was named as "***Perceived remuneration and promotion opportunity scale***".

The third factor had four items; freedom to choose and decide your own working methods, the freedom you have to work alone on the job, support given to be fully accountable for your decisions

and adequate consideration given to your opinion and suggestion for change in the work setting were loaded on to factor three. This scale was named as “*perceived autonomy at work scale*”.

The fourth factor comprised of three items such as with the training opportunities available to you, training programs appropriate to enhance your professional job performance and your organization gives training and orientation for new staffs well. This scale was named as “*perceived professional in/off service training scale*”.

The fifth factor included three items like; good working relationship you have with your colleagues, by your dependency on your colleagues for support and existence of clear channel of communication at your workplace. This scale was named as “*Perceived staff interaction scale*”.

The reliability coefficient for the first, second, third, fourth and fifth was 0.853, 0.817, 0.835, 0.825 and 0.829 respectively. Out of the total 23 items entered in to the model, three items were removed due to cross loading effect observed.

**3. Perceived Organizational Support:** It refers to the extent to which employees see that the organization recognizes their contribution and cares about their well-being and benefit. It was measured with 6 pre-assumed scales and total of 30 items: perceived value and care for employee (It defines a job characteristic that the organization acknowledges the effort of health professionals and care for their wellbeing), perceived concern for employee (It is the way how the organization is being open to the needs and questions of the health professionals), perceived work life balance(refers to the efforts of the organization to provide employment practice that help the professional to balance their work and personal obligations), perceived HR policy and practice (it indicates the effectiveness of HR policy and practices of health facilities), perceived compensation and benefit package (refers to the allowances/payment given to the professionals in addition to the basic salary by considering relevant issues), and Perceived working environment and location of facility (refers to the availability of infrastructural and locational advantage of the facility). These scales were measured by 4, 4, 8, 7, 3 and 4 items of 5-point Likert scale respectively, 1 denoting strongly disagree and 5 denoting strongly agree. Each score was created on a factor analysis and higher scores indicate higher perceived organizational support.



After conducting factor analysis, the following scales were emerged as part of the tools that measure *perceived organizational support*: six factors with Eigen value greater than one were extracted. These six factors explained 67.74% of the variability in perceived organizational support among the respondents. Five items were loaded on the first factor, items include: the transfer policy is consistent and fair; there is a transfer policy that guarantee easy transfer to other facility; there is clear policies and procedures on how to evaluate employees' performance, there is a consistent /unbiased application of promotion policy and there is clear training and development policy. This scale was named as "*perceived human resource policy & practice scale*".

The second factor had four items: the location of facility gives me an opportunity to generate additional income; there is sufficient infrastructure in the place where the facility is located; the weather condition where the facility located is conducive for living and the cost of life where the facility is located is fair. This scale was named as "*perceived facility location scale*".

The third factor had three items: I have reasonable leisure time, I have sufficient time to undertake both my job and family related issues and the facility provides good health care service to my family. This scale was named as "*perceived work-life balance scale*".

The fourth factor had three items: the organization shows very little concern for me (R), even if I did the best job possible, the organization would fail to notice (R) and the organization would ignore any complaint from me(R). This scale was named as "*perceived concern for employee scale*".

The fifth factor had three items: my work load don't affect my personal life, my job permits me to undertake my social obligations and i work under less stressful situation. This scale was named as "*perceived organizational work-load scale*".

The sixth factor had three items too: the organization really cares about my well-being, the organization values my contribution to its well-being and the organization fails to appreciate any extra effort from me(R). This scale was named as "*perceived value and care for employee*".

The reliability coefficients of the first, second, third, fourth, fifth and six scales were 0.851, 0.812, 0.780, 0.779, 0.777 and 0.712 respectively. From the total of 30 items entered in to the model, 9 items were removed from the analysis due to cross-load on to more than one factor that created complex structure.

**4. Organizational commitment:** It is the relative strength of an individual's linkage to the organization. This was measured using 3 components of pre-assumed scales (affective/affection for job, continuance/fear of loss, normative commitment/sense of obligation to stay) that was measured by 8 items each (24 total items) with 5-point Likert scale, 1 denoting strongly disagree and 5 denoting strongly agree. Each score was created on a factor analysis and higher scores indicate higher perceived organizational commitment.

After conducting factor analysis, the following scales were emerged as part of the tools that measure *organizational commitment*: three factors with Eigen value greater than one were extracted. These three factors explained 61.77% of the variability in organizational commitment among the respondents. Eight items were loaded on to the first two factors each and four items were loaded on to the third factor. Factor one include: it would be too costly for me to leave my organization now; one of the few serious consequences of leaving this organization would be the scarcity of available alternatives; too much in my life would be disrupted if I decided to leave my organization now, one of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice—another organization may not match the overall benefits I have here, I feel that I have very few options to consider leaving this organization, right now, staying with my organization is a matter of necessity as much as desire, I don't think that people these days move from facility to facility too often and it would be very hard for me to leave my organization right now, even if I wanted. This scale was named as "*continuance commitment scale*".

The second factor also loaded by eight items: I feel like 'part of the family' at my organization; this organization has a great deal of personal meaning for me, I feel a 'strong' sense of belongingness to my organization, I would be very happy to spend the rest of my career with this organization, I enjoy discussing about my organization with people outside it, I feel 'emotionally attached' to this organization, I think that I could easily become attached to another organization as I am to this one(R) and I really feel as if this organization's problems are my own. This scale was named as "*affective commitment scale*".

The third factor contain four items like I believe that a person must always be loyal to his or her organization, I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful, I was taught to believe in the value of remaining loyal to one

organization and one of the major reasons I continue to work in this organization is that I believe loyalty is important and therefore feel a sense of moral obligation to remain. This scale was named as “*normative commitment scale*”. The reliability coefficients (cronbach’s alpha) of the first, second and third scale was 0.909, 0.777 and 0.803 respectively. Out of 24 items entered to the factor analysis, four items were removed from the analysis due to cross-loading effect within 2 round of extraction process.

**5. Perceived personal characteristics:** those characteristics that are highly belongs/contextual to the individuals life/experience like substance use (kchat, cigarette, alcohol...), punctuality, stress, work load, skill, motivation, responsiveness, outcome-oriented, absenteeism at working time, sense of being responsible and accountable for one’s action. This was measured using pre-assumed 10 scales/variables that was measured by 1 item each with 5-point Likert scale, 1 denoting strongly disagree and 5 denoting strongly agree. Each score was created on a factor analysis and higher scores indicate higher perceived personal characteristics inline with expected ethical practice.

After conducting factor analysis, a single scale was emerged as part of the tools that measure *perceived personal characteristics*: only one factor with Eigen value greater than one was extracted. This scale explained 62.07% of the variability in perceived personal characteristics among the respondents. Items like; I believe that the end (outcome) justifies the means in providing services so I am outcome-oriented, I feel as I am responsive/client-centered in my profession, I am always on time for work, I and my co-workers feel about me as I am being responsible and accountable for my action, I believe that using any type of addictive substance has negative effect on one’s professional role, my work load is beyond what others had that made me more committed to my profession, the exposure to life and death situation makes me stressed that affect my performance. Out of 10 items entered to the factor analysis, 3 items were removed due to cross-loading on more than one factor at the first step of extraction then after removing them, 7 items were loaded on to single factor that name as “*perceived personal characteristics scale*”. The reliability of items used in this scale was a Cronbach’s alpha of 0.898 (reliability coefficients).

**6. Perceived Institutional delivery service uptake:** health sector has goal for maternal health improvement through maternal health service provision so that in what way the health professionals’ perceived/comply it, including the institutional delivery services’ plan and its uptake, a motto of home delivery free kebeles, team approach/work, availability of reasonable feedback,

achievable goal, shared vision, respecting rules, and punishment for medical error while providing delivery services. This was measured using pre-assumed 8 scales/variables that contain single item each of 5-point Likert scale, 1 denoting strongly disagree and 5 denoting strongly agree. Each score was created on a factor analysis and higher scores indicate higher/increased perceived institutional delivery service and organizational goal uptake.

After conducting factor analysis, the following scales were emerged as part of the tools that measure *perceived institutional delivery services uptake*:- two factors with Eigen value greater than one were extracted. This scale explained 69.68% of the variability in perceived institutional delivery services uptake among the respondents. Out of 8 items entered to the factor analysis, all items were loaded on both of factors equally. The first factor include items like; At my facility as well as in health sector we had shared vision towards delivery service provision to be increased so as to reduce maternal morbidity & mortality, At my facility level, the planed objective on institutional delivery service is achievable, measurable and realizable, I believe ‘home delivery free kebeles’ motto may increase uptake of institutional delivery services and I think at national level, the maternal health goal is over ambitious so it is difficult to achieve(R). This scale named as “*Perceived maternal health goal scale*”.

The second factor contain; I feel the facility level rules and regulations are not respected in line with professionals ethics (R), I think those professionals who are negligent in delivery service provision should be punished and dismissed from that profession legally, At my health facility, delivery service providers' case team approach is well organized and There is periodic, reasonable feedback to my performance. This scale named as “*Perceived institutional delivery services provision scale*”. The reliability of items used in the first and second scales were a Cronbach’s alpha of 0.856 and 0.852 respectively (reliability coefficients).

**7. Professional commitment:** It is the relative strength of an individual’s linkage to the respective profession. It is beyond a commitment for a particular organization and implies the individuals’ perspective toward their profession and the motivation that they have to stay in their job which refers to one’s loyalty to the profession and the willingness to strive and uphold the values and goals of the profession to maintain membership in the profession that can be explained by adherence to principles of ethical practice, effective interactions with patients and with other people working in the healthcare system, reliability, commitment to autonomous maintenance and continuous improvement of competence, pride in profession & good behavior outside work. This was measured using 10 items of 5-point Likert scale and 1 denoting strongly disagree and 5

denoting strongly agree. Professional commitment score was created and higher score indicates higher professional commitment.

Note: The mean scores for all scales were reported as the percentages of scale mean score (%SM) after standardization the mean was calculated. It ranges from “0%” to “100%”. For each case, it was calculated as follows: (65, 66).

$$\%SM = \frac{\text{Actual score} - \mathbf{P.minimum}}{\mathbf{P.Maximum} - \mathbf{P.minimum}} \times 100\%$$

The commitment scores were standardized as the percentage of the maximum possible scale scores to facilitate comparison. This enables future researchers to compare their findings with those in this study even if they make use of different number of items and/or response categories. After calculating the *percentages of maximum possible scale score* using the above formulae for each scale scored by each case, the *percentages scale mean* (%SM) was analyzed descriptively.

After conducting factor analysis, a single scale was emerged as part of the tools that measure *professional commitment*: only one factor with Eigen value greater than one was extracted. This scale explained 61.22% of the variability in professional commitment among the respondents. Out of 10 items entered in to the PCA model, all of them were loaded perfectly with out any removal. These are; I am willing to put in a great deal of effort to develop my profession beyond expected, I am a person who identifies strongly with my profession, I would accept almost any type of job that related to my profession to keep working beyond expected from me, I am a person who feels strong ties with other members of my profession, I am a person who is proud to belong to my profession, my profession really inspires the very best in me in the way of job performance, I am extremely glad that I chose this profession to work for ever in advance, I am a person who criticizes my profession (R), I am a person who considers my profession to be important, I am a person who tries to hide belonging to my profession (R). This scale was named as “*professional commitment scale*”. The reliability of items used in this scale was a Cronbach’s alpha of 0.929 (reliability coefficients).

#### **4.8. Data processing and analysis**

Auditing, coding and sorting of the collected questionnaires done manually every day to check for completeness. The completed questionnaire coded and entered into a data entry template in EPI-DATA version 3.1. After checking and correcting errors, the data was exported to SPSS version 20 for analysis. The negatively worded items were reverse-scored.

All assumptions of linear regression were checked. Normality of distribution was checked by observing using histogram. Linearity was checked by observing scatter plot/p-p plot and observing proportional distribution of dependent and independent variables. Multicollinearity was checked by examining the variance inflation factors (VIF) so if the values for each variables is less than or equal to 5 was taken as no similarity/singularity or correlation coefficient  $<0.9$ . Finally, homoscedasticity was checked by observing all residual, box plots and scatter plots. So, all plots and contained points expected to have the same width (approximately, 0 variance)

In addition to this, all the assumptions of factor analysis/PCA were checked to conduct data reduction. Bartlett's Test of Sphericity was checked and it was taken as significant at  $p < 0.05$  to conduct factor analysis. Sampling adequacy for factor analysis/PCA checked with Kaiser-Meyer-Olkin measure of sampling adequacy and the results in this measurement accepted if it is  $>0.5$ . Varimax rotation employed during factor extraction to minimize cross loading of items on to many factors.

Raw means, standard deviations, mean scores, summary tables, and graphs were used for describing the data. Simple linear regression was conducted and significant variables at  $p$ -value  $< 0.25$  taken as candidate for hierarchical multiple linear regressions using pre-assumed dimensions. T-test and/or one way ANOVA was used for comparing professional commitment mean scores between gender, working facility (HC and hospitals) professions and qualification. Factors predicting professional commitment were identified using multiple linear regression analysis at a significance level of  $p$ -value  $< 0.05$  with 95% confidence interval. The reduced final model was constructed using backward model selection method for final model after selecting each candidates from five models using enter method hierarchically. The qualitative data were analyzed manually using thematic analysis method and finally it was presented with quantitative result through triangulation.

#### **4.9. Data quality management**

The questionnaire initially prepared in English was translated into Amharic, and then back translated into English to ensure consistency. The questionnaire was pretested on 5% of the actual sample size in Jimma zone on those health facilities that are not already sampled (i.e. Yebu health center and Jimma University Specialized Hospital) before the actual data collection period to make correction on tool accordingly. Training was given for both data collectors and supervisors for one day by the investigator. There was supervision on daily basis, and checking on 10% of the collected questionnaire conducted by the investigator. Finally, verification was done by checking error report after entry to Epidata using each case code. Split sample validation and outliers' detection done.

#### **4.10. Ethical consideration**

Ethical approval or clearance letter obtained from institutional reviewing board (IRB), Jimma University, College of health sciences. Permission letter obtained from Jimma zone health department and respective woreda health offices. Anonymity of the participants was kept by informing them not to write their name and individual's information was not be disclosed to other person or party, and informed consent was taken. Participants told that they had full right to participate or refuse participation in the study. Have the right to stop in the meantime while completing questioners if not feeling comfortable, keeping in mind the rationale of the study and benefit of his/her response.

#### **4.11. Dissemination of the result**

The findings of this study will be presented to JU scientific community to defend. After its approval by the department, it will be presented to relevant national and international conferences, preserved at JU library and at the department of health Economics, Management, and Policy. It will be communicated to the local health planners and other relevant stakeholders. In addition, it will be reported to the PI of mega-research project team (Dr.Mirkuzie Wolde) when finalized. Lastly, the manuscript will be submitted for publications to peer reviewed and reputable national or international journal.

## Chapter Five: Results

### 5.1 Socio-demographic Characteristics

Among the eligible 442 participants, 417 (94.34%) were returned the questionnaires. Out of the returned questionnaires, five were discarded due to incompleteness. Taking these into consideration, the response rate became 93.21% (412/442). Little more than half (228 (55.3%)) of the respondents were males. Almost half of the respondents were single in marital status (202(49%)). The average age of the participants was 27.84 (SD 4.38) year with a range of 21 to 52 years. The mean work experience at the current health facility was 1.62 (SD 0.87) years, ranging from six month to 31 years. Nearly one third (128 (31.1%)) were nurses followed by health officers (69(16.7%)). Out of 412 professionals, 240 (58.25%) of them have bachelor degree level of educational qualification which is followed by Diploma holders (158 (38.35%)). Two hundred forty four (59.2%) participants were from health centers, and 212 (51.5%) of the participants live in rural area. One hundred twelve (27.2%) of the participants were working in a managerial position (facility head/CEO, technical head, case team leader, medical director, human resource head). The median net monthly salary was 2514 Birr [SD 1264.70 Birr], ranging from 1019 Birr to 7424 Birr and nearly one third of (129 (31.3%)) them were paid between 3000-4500 Birr (Table 1, Figure 1). (Note:-1 US dollar =21.25 Ethiopian Birr during the data collection period).



**Table 1-** Socio-demographic characteristics of health professionals working in Jimma Zone government health facilities, Oromia Regional State, Southwest Ethiopia, 2016(n=412)

| <b>Variable</b> | <b>Categories</b>     | <b>N<sub>o</sub> (%)</b> |
|-----------------|-----------------------|--------------------------|
| Sex             | Female                | 184(44.7)                |
|                 | Male                  | 228(55.3)                |
| Age             | 20-24                 | 30(7.3)                  |
|                 | 25-29                 | 281(68.2)                |
|                 | 30-35                 | 62(15)                   |
|                 | 36 and above          | 39(9.5)                  |
| Marital status  | Single                | 202(49)                  |
|                 | Married               | 195(47.4)                |
|                 | Widowed/divorced      | 15(3.6)                  |
| Work experience | ≤ 2                   | 231(56.1)                |
|                 | 2.01-5                | 116(28.2)                |
|                 | >5                    | 65(15.77)                |
| Qualification   | Diploma               | 158(38.35)               |
|                 | First-degree/bachelor | 240(58.25)               |
|                 | Postgraduate          | 14(3.4)                  |
| Residence       | urban                 | 200(48.5)                |
|                 | Rural                 | 212(51.5)                |

**Table 1-(cont'd)**-Socio-demographic characteristics of health professionals working in Jimma Zone government health facilities, Oromia Regional State, Southwest Ethiopia, 2016(n=412)

| Variable            | Categories               | N <sub>0</sub> (%) |
|---------------------|--------------------------|--------------------|
| Type of facility    | Health center            | 244 (59.2)         |
|                     | Hospital                 | 168 (40.8)         |
| Type of post        | Managerial               | 112(27.2)          |
|                     | None managerial          | 300(72.8)          |
| Profession category | Nurse                    | 128(31.1)          |
|                     | Midwifery                | 62(15)             |
|                     | Health officer           | 69(16.7)           |
|                     | Medical lab/ technicians | 53(12.9)           |
|                     | Pharmacist/druggist      | 47(11.4)           |
|                     | GP/medical doctor        | 30 (7.3)           |
|                     | Others**                 | 23(5.6)            |

\*\*Others:ESO and anesthesia

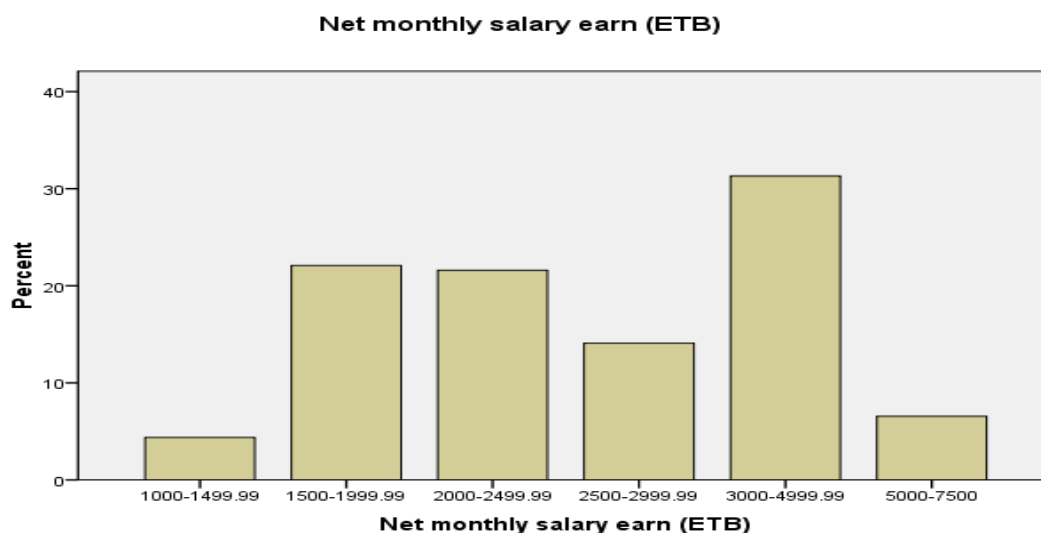


Fig 3-Net monthly salary of the study participants, Jimma Zone, 2016

## 5.2 Level of professional commitment

Professional commitment percentages mean score of health professionals who participated in this study was 72.71% (SD=21.88). On the other hand, mean raw score of this scale was 39.08± 8.8 with a total rotated variance explained (61.22%) using principal component factor extraction analysis. Half (50%) of them were agreed as they strongly identified with their profession. More than one third reported that they were glad to belong to their profession as agree and strongly agree (37.4%, 34.2%) (See at Annex-V). When the participants categorized in to two, 257(62.4%) of them were above the percentage mean score and the remaining were below the percentage mean score. (Table 2)

**Table 2-** Mean score for professional commitment of health professionals, Jimma Zone, government facilities, Oromia Regional State, Southwest Ethiopia, 2016 (n=412)

| Emerged factor (scale)                                    | Mean raw score±SD | %SM    |
|---|-------------------|--------|
| Professional commitment (Total variance explained-61.22%) | 39.08± 8.8        | 72.71% |

%SM is the Standardized mean score as the percentage of possible maximum scale score, and it lies between 0 and 100.

Key informants of the in-depth interviews expressed that the commitment level of health professionals can be ranged as medium to high. The respondents said that their commitment was evidenced by the many health facilities found in the zone that are highly performing and awarded both at regional and national level specially from primary hospitals. The efforts the health professionals put into the health promotion activities in the community were considered to be indicative of their commitment to their profession due to the Oath that they promised to serve the community.

One health manager said, *“The high level of client satisfaction registered in our wereda (85%) is a manifestation of the professional commitment of health professionals in our wereda”*.

The other technical head who is 36 years old said, *”in my facility the health professionals are highly committed that manifested by our good performance on different service provision like institutional delivery service uptake increased from 35% to 85% but I am not saying that all are committed because commitment to ones profession depends on their status, type of profession, the responsibility that they had, attitude towards their profession and the like”*

In addition to that, one midwife nurse with the age of 27 and delivery case team leader said *” I am a person who identifies strongly with my profession or proud to belong to my profession and I have strong ties with other members of my profession since health care is team approach. I am extremely glad that I chose this profession to work for ever in advance because my profession really inspires the very best in me in the way of job performance due to my strong commitment I have why mother die while she gives life since I am a professional. I have to help or care her in a compassionate and respectful way.”*

### 5.3. Level of perceived organizational support

Perceived organizational support percentages mean score for perceived value and care for employee scale was the highest (49.92%) followed by perceived concern for employee scale (47.94%). The higher mean scores indicate higher perceived organizational support in relation with perceived value and care, and perceived concern for employee scales. Percentages mean score for perceived facility location scale was the least (36.21%). All six factors extracted in the model explain a total variability of 67.74% (Extraction rotated Sums of Squared Loadings).(Table-3)

**Table 3-** Mean score for perceived organizational support of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Emerged factors (scales)              | Mean raw score $\pm$ SD | %SM   |
|---------------------------------------|-------------------------|-------|
| Perceived HR policy & practice        | 12.32 $\pm$ 4.7         | 36.60 |
| Perceived facility location           | 9.79 $\pm$ 3.88         | 36.21 |
| Perceived work-life balance           | 7.36 $\pm$ 3.07         | 36.35 |
| Perceived concern for employee        | 8.75 $\pm$ 3.02         | 47.94 |
| Perceived organizational work-load    | 8.42 $\pm$ 3.16         | 45.19 |
| Perceived value and care for employee | 8.99 $\pm$ 2.04         | 49.92 |

%SM is the Standardized mean score as the percentage of possible maximum scale score, and it lies between 0 and 100

### 5.4. Level of perceived job satisfaction

For the job satisfaction part, percentages mean score for perceived staff interaction scale was the highest (61.04%) followed by perceived working environment/work setting scale (48.30%). The higher mean scores indicate higher job satisfaction in relation with these scales/variables. Percentages mean score for perceived remuneration and promotion opportunity scale was the least (30.81%). All five factors extracted, explain a total variability of 68.34% resulted from rotated total variance explained/sum of square loading in principal component analysis). (See Table 4)

**Table 4-** Mean score for perceived job satisfaction of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Emerged factors (scales)                         | Mean raw score±SD | %SM   |
|--|-------------------|-------|
| Perceived working environment/work setting       | 14.66±4.95        | 48.30 |
| Perceived remuneration and promotion opportunity | 11.16±4.40        | 30.81 |
| Perceived autonomy at work                       | 11.21±4.03        | 45.04 |
| Perceived professional in/off service training   | 7.23±3.26         | 35.23 |
| Perceived staff interaction                      | 10.33±3.06        | 61.04 |

%SM is the Standardized mean score as the percentage of possible maximum scale score, and it lies between 0 and 100.

### 5.5. Level of organizational commitment

For the organizational commitment part, percentages mean score for normative commitment scale was the highest (59.13%). The higher mean score in perceived organizational commitment was in relation to normative commitment scale/variable. Percentages mean score for continuance commitment scale was the least (45.90%). All the three factors extracted explained a total variability of 61.77%. (Table 5)

**Table 5-** Mean score for organizational commitment of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Emerged factors (scales) | Mean raw score ±SD | %SM   |
|--------------------------|--------------------|-------|
| Affective commitment     | 24.72±6.29         | 52.25 |
| Continuance commitment   | 22.69±7.70         | 45.90 |
| Normative commitment     | 13.46±3.97         | 59.13 |

%SM is the Standardized mean score as the percentage of possible maximum scale score, and it lies between 0 and 100.

## 5.6. Level of perceived personal characteristics

Personal characteristics' percentages mean score of health professionals was 72.56%. The higher score indicate higher perceived personal characteristics participants had inline with expected professional ethical practice. The mean raw score was  $27.32 \pm 5.67$  with a total variance explained by the model (62.07%).(Table 6)

**Table 6-** Mean score for perceived personal characteristics of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Emerged factors (scales)           | Mean raw score $\pm$ SD | %SM    |
|------------------------------------|-------------------------|--------|
| Perceived personal characteristics | $27.32 \pm 5.67$        | 72.56% |

%SM is the Standardized mean score as the percentage of possible maximum scale score, and it lies between 0 and 100.

## 5.7. Level of perceived institutional delivery services uptake

For the institutional delivery services uptake part, percentages mean score of health professionals was 68.37% for perceived maternal health goal factor which is the higher mean score that indicate participants had high level of perceived maternal health goal. The crude mean raw score was  $23.15 \pm 4.50$  calculated using all items at once that measure both factors and a total variance explained by the model resulted 69.68%. (Table 7)

**Table 7-** Mean score for perceived institutional delivery services uptake by health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Emerged factors (scales)                            | Mean raw score $\pm$ SD | %SM   |
|---|-------------------------|-------|
| Perceived maternal health goal                      | $14.94 \pm 3.53$        | 68.37 |
| Perceived institutional delivery services provision | $8.21 \pm 2.63$         | 26.34 |

%SM is the Standardized mean score as the percentage of possible maximum scale score, and it lies between 0 and 100.

## 5.8 Predictors of professional commitment

### 5.8.1 Socio-demographic characteristics predictors

The model consisting of socio-demographic variables (age, gender, marital status, qualification, work experience, profession, type of working facility, type of post, area of residence and net monthly salary) explained only 2.7% variability in professional commitment among the participants (R square =0.027, adjusted R square=0.026, p=0.242). Among these variables only sex of the respondent (p=0.192), marital status (p=0.100), net monthly salary (p=0.040) were a candidate for multiple linear regression. From this model, net monthly salary was the predictor of professional commitment. The result of independent t-test showed that professional commitment percentages mean score of health professionals was significantly different between female (74.14%) and male (71.56%) (p=0.045) but not significant between hospitals (72.49%) and health centers (72.87%) (p=0.212). One Way Anova using Bonferroni test showed that professional commitment percentages mean score of health professionals was significantly different between diploma (%SM=74.21) and postgraduate (%SM=66.42) (p=0.049), and between nurses ((%SM=74.62) and ESO (%SM=65.42) as well as medical laboratory/lab.technician (%SM=77.50) and ESO (%SM=65.42)(p=0.045) (Table 8 & Fig 2 )

**Table 8-**Socio-demographic related predictors of professional commitment of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Socio-demographic and economic related factors | Unstandardized    | Standardized         | Significance<br>P value | 95% CI for B |       |
|--|-------------------|----------------------|-------------------------|--------------|-------|
|  | Coefficients<br>B | Coefficients<br>Beta |                         | Lower        | Upper |
| Gender   | -.102             | -.051                | .192**                  | -.322        | .065  |
| Marital status (dichotomized)                  | -.136             | -.081                | .100**                  | -.299        | .026  |
| Net monthly salary earn (ETB)                  | -.072             | -.101                | .040*                   | -.141        | -.003 |
| Area of residence                              | -.099             | -.050                | .326                    | -.298        | .100  |
| Age  | .072              | .053                 | .344                    | -.077        | .221  |
| Qualification                                  | .101              | .060                 | .390                    | -.130        | .333  |
| Type of position                               | .081              | .036                 | .465                    | -.136        | .298  |
| Year of service at that facility               | .053              | .043                 | .479                    | -.093        | .199  |
| Profession                                     | -.004             | -.008                | .884                    | -.054        | .047  |
| Working Facility                               | -.020             | -.010                | .905                    | -.356        | .315  |

R=0.161, R Square= 0.027, Adjusted R Square=0.026, \* significant at p value < 0.05, \*\* candidate for MLR at p<0.25

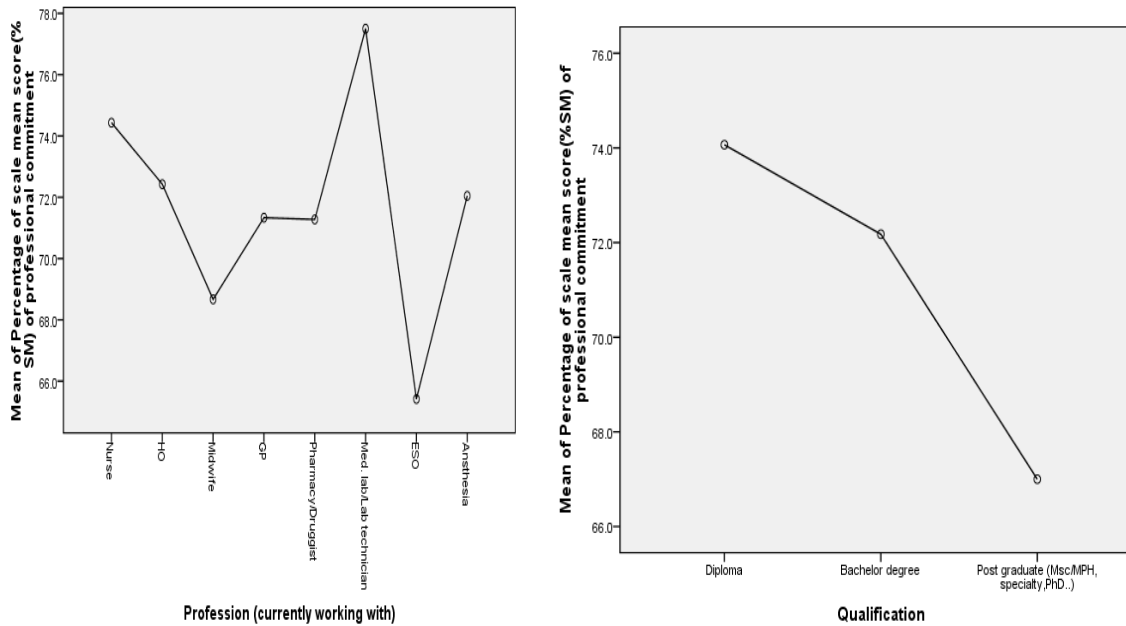


Fig 4- Professional commitment mean scores difference between qualifications (diploma and postgraduate) and professions (Nurse, Medical laboratory and ESO), Jimma Zone, 2016.

### 5.8.2 Perceived organizational support predictors

In this model, six factors related with organizational support were entered. Except perceived human resource policy and practice score ( $p=0.527$ ), all factors score were significant to be a candidate for multiple linear regression analysis ( $p<0.25$ ). On the other hand, perceived value and care for employee score ( $p<0.01$ ,  $B=0.162$ ,  $95\%CI=0.070, 0.253$ ), Perceived facility location score ( $p<0.1$ ,  $B=0.088$ ,  $95\%CI=-0.004, 0.180$ ), Perceived work-life balance score ( $p<0.01$ ,  $B=-0.122$ ,  $95\%CI=-0.214,-0.030$ ), Perceived concern for employee score ( $p<0.01$ ,  $B=-0.157$ ,  $95\%CI=-0.249,-0.065$ ), and Perceived organizational work-load ( $p<0.01$ ,  $B=0.162$ ,  $95\%CI=0.070, 0.254$ ) were a significant predictor of professional commitment score. This model explained 30.0% (adjusted R square =0.300,  $p<0.001$ ) of the variability in professional commitment. (Table 9)



**Table 9-** Perceived organizational support related predictors of professional commitment of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Perceived organizational support related factors | Unstandardized Coefficients | Standardized Coefficients | Significance | 95% CI for B |       |
|--|-----------------------------|---------------------------|--------------|--------------|-------|
|  | B                           | Beta                      | P value      | Lower        | Upper |
| Perceived HR policy & practice score             | .030                        | .030                      | .527@        | -.062        | .122  |
| Perceived facility location score                | .088                        | .088                      | .061*        | -.004        | .180  |
| Perceived work-life balance score                | .122                        | .123                      | .009**       | .014         | .130  |
| Perceived concern for employee score             | .157                        | .158                      | .001**       | .090         | .165  |
| Perceived org. work-load score                   | .162                        | .163                      | .001**       | .070         | .254  |
| Perceived value and care for employee score      | .162                        | .163                      | .001**       | .070         | .253  |

Constant= 0.003, R=0.558, R Square=0.312, Adjusted R Square=0.300, \*\* significant at p value < 0.01, \* significant at p value p<0.1, and @ denote 'not candidate for further analysis'

### 5.8.3 Job satisfaction predictors

Five factors related with job satisfaction were entered in to the model. Out of which four were significant predictors of professional commitment. Perceived staff interaction was the strongest predictor (B=0.326, 95% CI=0.237, 0.415, p=0.000) followed by perceived autonomy at work (B=0.124, 95% CI=0.035, 0.213, p=0.007). The other two predictors were perceived professional in/off service training (B=0.061, 95% CI=-0.028, 0.150, p=0.178) and perceived working environment/work setting (B=0.057, 95% CI=-0.032, 0.146, p=0.207). But perceived remuneration and promotion opportunity had no significant relation with professional commitment score (p=0.538). Almost 13% of the variance in professional commitment was explained by this model (adjusted R square=0.127, p<0.001). (Table 10)

**Table 10-** Perceived job satisfaction related predictors of professional commitment of health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Job satisfaction related predictors                       | Unstandardized | Standardized | Significance | 95% CI for B |       |
|---|----------------|--------------|--------------|--------------|-------|
|   | Coefficients   | Coefficients |              | Lower        | Upper |
|   | B              | Beta         | P value      |              |       |
| Perceived working environment/<br>work setting score      | .057           | .058         | .207**       | -.032        | .146  |
| Perceived remuneration and<br>promotion opportunity score | -.028          | -.028        | .538@        | -.117        | .061  |
| Perceived autonomy at work score                          | .124           | .126         | .007*        | .035         | .213  |
| Perceived professional in/off<br>service training score   | .061           | .062         | .178**       | -.028        | .150  |
| Perceived staff interaction score                         | .326           | .332         | .000***      | .237         | .415  |

Constant= 0.010, R=0.366, R square=0.136, adjusted R square =0.127, \*\*\* significant at P value < 0.001, \* at p<0.05, \*\* at p<0.25 to be a candidate for MLR and @ denoted not candidate for MLR.

#### 5.8.4 Organizational commitment predictors

Three factors related with organizational commitment components were entered in to the model. Out of which two were significant predictors of professional commitment. Both affective commitment score (B=0.264, 95% CI=0.180, 0.349, p=0.000) and normative commitment score (B=0.403, 95% CI=0.319, 0.488, p=0.000) were stronger predictors, and normative commitment score was the strongest among all. But continuance commitment score was not significant predictor of professional commitment (p=0.572). About 23.2% of the professional commitment variability explained by this model. (Table 11)

**Table 11-** Organizational commitment related predictors of professional commitment amongst health professionals, Jimma Zone, government facilities, Southwest Ethiopia, 2016 (n=412)

| Organizational<br>commitment related<br>factor score | Unstandardized | Standardized | Significance | 95% CI for B |       |
|--|----------------|--------------|--------------|--------------|-------|
|  | Coefficients   | Coefficients |              | Lower        | Upper |
|  | B              | Beta         | P value      |              |       |
| Affective commitment                                 | .264           | .266         | .000**       | .180         | .34   |
| Continuance commitment                               | -.024          | -.024        | .572*        | -.109        | .060  |
| Normative commitment                                 | .403           | .406         | .000**       | .319         | .488  |

Constant= 0.003, R=0.485, R square=0.235, adjusted R square =0.232, \*\* significant at P value < 0.001, \* p>0.25

### 5.8.5. Perceived personal characteristics and IDS uptake predictors

Three factors related with perceived personal characteristic, and IDS uptake were entered in to the model because single variable emerged as personal X-stics score can't fit multiple linear regression. Out of which two were significant predictors of professional commitment. Both personal characteristics score (B=0.412, 95%CI=0.303,0.522, p=0.000) and maternal health goal score (B=0.227,95%CI=0.117, 0.336, p=0.000) were stronger predictors, and personal characteristics score was the strongest among all. But institutional delivery service provision factor score was not significant predictor of professional commitment (p=0.461). Almost 36% of the professional commitment variability explained by this model(R square=0.358, adjusted R square =0.355, P= 0.000). (Table 12 )

**Table 12-** Personal characteristics and IDS uptake related predictors of professional commitment amongst health professionals,Jimma Zone, government facilities, SW Ethiopia, 2016 (n=412)

| Personal characteristics and IDS uptake related factors | Unstandardized Coefficients | Standardized Coefficients | Significance | 95% CI for B |       |
|---|-----------------------------|---------------------------|--------------|--------------|-------|
|   | B                           | Beta                      | P value      | Lower        | Upper |
| Institutional delivery service provision score          | .029                        | .029                      | .461**       | -.048        | .107  |
| Personal X-stics score                                  | .412                        | .415                      | .000*        | .303         | .522  |
| Perceived maternal health goal score                    | .227                        | .228                      | .000*        | .117         | .336  |

Constant= 0.003, R=0.598, R square=0.358, adjusted R square =0.355, \* significant at P value < 0.001 and \*\* not candidate for MLR at p>0.25.

### 5.8.6. Independent predictors of professional commitment

These 16 variables, which had statistical significant association with professional commitment in the preceding five models, were entered into the final model (MLR). Out of that only 8 variables retained in the last backward stepwise model from which six of them were significant independent predictors of professional commitment factor score (p <0.05 and/or p <0.001). This model explained almost 45% (R = 0.665, R Square =0.452, Adjusted R Square=0.445) of the variability in the professional commitment factor score. None of the Socio-demographic and economic variables was significant predictor in the final model. (Table 13)

In this study a one unit increment in perceived staff interaction score resulted in 0.089 unit increase in the professional commitment score of health professionals (95%CI: 0.010, 0.168;  $p < 0.01$ ) keeping constant all other variables in the model.

From the qualitative part we analyzed that good working relationship professionals have with their colleagues, existence of clear channel of communication at workplace, supporting each other on service provision to have team approach, atmosphere of co-operation between staff and management and management involvement of staff in decision making are the major indicators of good staff interaction.

The one who is the head of health center said *“Even not only the interaction with co-workers that increase professional commitment but also the interaction with the community through different programs and channels can affect it positively because those professionals that had relative or family in the community always committed to provide the service that inturn affect the professional commitment level” and the interaction that we had with management of facility matters too.”*

One unit increment in the perceived work-life balance score of the professionals increases their professional commitment score by 0.147 (95%CI: 0.020, 0.172,  $P < 0.001$ ).

One health professional whose age is 29 and matron said *“I have sufficient time to undertake both my job and family related issues, I have reasonable leisure time, I work under less stressful situation , my work load don't affect my personal life and my job permits me to undertake my social obligations because all these things are managed by myself based on the value I gave to my time so that I can be committed to my profession if the work-life is balanced..”*

The other predictor variable of professional commitment was organizational affective commitment score. It was found that a unit increment in the organizational affective commitment score leads to an increment of professional commitment score by 0.151 (95%CI=0.071, 0.230,  $P < 0.001$ ).

One human resource manager said *“I enjoy discussing about my organization with people outside it, I really feel as if this organization's problems are my own because I feel like 'part of the family' at my organization and I feel a 'strong' sense of belongingness to my organization so that I would be very happy to spend the rest of my career with this organization. These all made me committed to my profession even if those only are not my factors.”*

Moreover, this study showed positive predictive relationship between organizational normative commitment factor score and professional commitment score. So, a unit increase in the organizational normative commitment score results increment of 0.238 units in the professional commitment score (95%CI=0.159, 0.318, P=0.000).

In relation to this, the key informants explained that health professionals lack appropriate residential places in rural areas and who manage to find one suffer from lack of basic infrastructures like electric power, clean water and network services so that is difficult to be committed to ones organization. Accordingly, one health manager said, *“Health professionals working in rural areas in our zone face some challenges like lack of infrastructure which can affect their organizational commitment but may not affect their professional commitment because still they are serving the community by their profession. I believe that a person must always be loyal to his or her organization, one of the major reasons I continue to work in this organization is that I believe loyalty is important and therefore feel a sense of moral obligation to remain working here because things were better in the days when people stayed in one organization for most of their careers. For me this is the best of all possible organizations for which to work in the health sector. Therefore, I am always committed to my profession or job to accomplish organizational plan.”*

The strongest predictor of professional commitment was perceived personal characteristics score, which was followed by NOC. It was found that a unit increment in the personal characteristics score leads to an increment of professional commitment score by 0.307 (95%CI=0.200, 0.414, P<0.001).

In relation to personal characteristics of professionals, key informants complained as addiction with any substance, non punctuality, having stress and own work load, hopelessness, absenteeism irresponsible action and other related with personality greatly affect professional commitment.

One CEO said, *“I believe that using any type of addictive substance has negative effect on one’s professional role , my work load is beyond what others had that made me more committed to my profession, I feel as I am motivated to give the service up to my professional level to prevent maternal death. I feel as I am responsive in my profession, I may not be absent from work even if I faced difficult problem, I feel as I am being responsible and accountable for my action so that I can say am committed confidently.”*

*In contrary, one nurse said, “both work overload and stress in this job were the main causes of my fetus’s death. I think that I am experiencing depression. How I could be committed to this profession”.*

The last but not least, there is a positive predictive relationship between professional commitment score and perception of maternal health goal score. It was found that a unit increment in the perception of maternal health goal score leads to an increment of professional commitment score by 0.154 (95%CI=0.050, 0.259, P<0.001).

The one who is delivery case team leader said, *“I think at national level the planed maternal health goal is achievable if we keep with this momentum, and at my facility level, the planed objective on institutional delivery service provision is achievable, measurable and realizable because in every structure we had shared vision towards delivery service provision to be increased so as to reduce maternal morbidity & mortality. Even there is a link from health post/community health to health center then to the hospital for instance ‘home delivery free kebeles’ motto implemented at lower level increased uptake of institutional delivery services at my facility.” But those professionals’ who are negligent in delivery service provision should be punished legally even if delivery service providers’ case team approach is well organized here.”*

Midwife nurse who is a technical head said, *“The managers left no chance for me to show my ability, and my knowledge. They suppress my confidence”*, another nurse head said, *“The managers try to suppress me because they think I can occupy their positions”*. This approach has led nurses to frustration, disaffection and finally leaving the profession: *“How I can be committed when I feel that they do not understand my work's value?”* in this case the service provision can be affected (IDS).

**Table 13-** Independent predictors of professional commitment of health professionals, Jimma Zone, government facilities, SW Ethiopia, 2016 (n=412) (multivariable linear regression)

| Variables  | Unstandardized    | Standardized         | P value | 95% CI for B |       |
|--|-------------------|----------------------|---------|--------------|-------|
|  | Coefficients<br>B | Coefficients<br>Beta |         | Lower        | Upper |
| 1. Perceived working environment/ work setting factor score    | -.066             | -.067                | .083    | -.141        | .009  |
| 2. Perceived professional in/off service training factor score | .062              | .063                 | .093    | -.010        | .135  |
| 3. Perceived staff interaction score                           | .089              | .091                 | .007*   | .010         | .168  |
| 4. Perceived work-life balance factor score                    | .147              | .150                 | .000**  | .020         | .172  |
| 5. Affective organizational commitment factor score            | .151              | .154                 | .000**  | .071         | .230  |
| 6. Normative organizational commitment factor score            | .238              | .243                 | .000**  | .159         | .318  |
| 7. Personal character factor score                             | .307              | .310                 | .000**  | .200         | .414  |
| 8. Perceived maternal health goal factor score                 | .154              | .156                 | .004*   | .050         | .259  |

*Constant=0.007, R = 0.672, R Square =0.452, Adjusted R Square=0.445, \* significant at p value <0.05, \*\*significant at p value <0.001,dependent variable:-professional commitment factor score ( $\pm 3$ ), Max VIF=1.06(no multicollinearity: at VIF<5)*

Finally, findings from the qualitative data also identified additional factors suggested to have positive impact on professional commitment among health professionals in this study. These include the presence of government policies to invest on human power, the presence of health extension workers, health development armies and other stakeholders in the community were the major opportunities. They explained that these policies and strategies decrease some work burden from the health professionals like community mobilization and home to home follow up of the health of the community. Therefore, professional can stick to the clinical services that can show/indicate their professional commitment while providing institutional delivery services. Many key informants said that even if there are many factors that can affect ones' professional commitment, they are temporary because professionalism is a force that binds an individual to a course of action which should tap the mindsets not always depend on incentives like salary, allowance and compensations.

In this regard, participants of the qualitative part elaborated the importance of giving recognition to health professionals to make them more committed. They explained this can create strong sense of competition, better job satisfaction and professional commitment among the health professionals.

One of the health managers in the zone said, *“We already started giving acknowledgment for well performing health professionals in our health facility and this created strong sense of competition among them and devotion to their organization as well as to their profession.”*

In this regard, the participants of the qualitative research said that there should be smooth management style to increase the organizational commitment of health professionals that directly affects ones professional commitment. They also raised an important issue that might affect the professional commitment of health professionals in Jimma zone as less frequent professional training opportunities given for them.

One of the health facility human resource manager said, *“Sometimes health managers in this zone blocked professional training opportunities. These health managers justified if health professionals are sent for training, clients may suffer with lack of service due to shortage of human power and also no adequate structure that can accommodate those graduates in second degrees”.*



## Chapter Six: Discussion

### 6.1. Professional Commitment

The result of this study point out that professional commitment percentage mean score of health professionals participated in this study was 72.71 % ( SD21.88). This result was lower than the result of research done on health professionals in Gujarat/India by Sunil Maheshwari et...al/2008, where the professional commitment mean score was 85.9% (n=440, 85.9%-maximum scale mean score) (9). This great difference of %SM may be due to the benefits, including pension benefits, housing loan, car loan and medical benefits which were provided by the organization to the professionals and those majority of study participants were doctors (good professional skills of the majority of respondents because most of the senior doctors were postgraduates with specializations in different fields) that had good relations with superiors, clarity on job objectives, and autonomy on work could help in delivering responsibilities professionally that may increase the professional commitment percentage mean score in the case of Gujarat/India.

When we compare this research result (%SM=72.71%) with other findings, it is greater than the result of research done on nurses in Saud Arabia where the professional commitments mean score of nurses was 57.43%(68). It was also much higher than the professional commitment mean score of health workers in Nigeria which was 55.15% (67) and it was somewhat greater than the result of research done on nurses in Taiwan in which the professional commitment mean score was 67% (68, 69). This may be due to the low reward system which was provided to the health care workers in the Nigerian case and the participant of the study were only nurses that reported high work load and stress so that may decrease their commitment in case of Taiwan and Saud Arabia than this study participants' include almost all types of profession.

Also this study revealed that more than two third of participants agreed or strongly agreed that they were glad to belong to their profession (n=295,71.6%) which is not supported by the research done at India, only one-third reported that they were glad to belong to their profession often or very often (32.6%)(9). This great discrepancy observed due to item based response comparison what we made, so that the standardized mean score is the best parameter for comparing findings to get full picture of study participants. In the contrary, within that same study, the majority of respondents reported that they never or seldom: tried to hide belonging to their profession (n=466, 91.0%).

## 6.2. Predictors of professional commitment

Perceived staff interaction score was the predictor of professional commitment in this study among job satisfaction related factors. This finding is similar with the findings of previous studies that showed some of the components of job satisfaction (staff interaction) were influential in explaining professional commitment among health professionals (48). In addition, this finding was consistent with study that showed positive association between staff interaction and professional commitment (67). These imply health professionals who were satisfied with the communication and interaction among staffs and the support they get from their staffs were more likely to be committed to their profession as well as to the organizations. In fact, people who have higher job satisfaction are more loyal to their employer and like their job more. Therefore, they can satisfy their needs and have positive feelings towards the profession and other staffs to interact in a good way (42). According to Locke, job satisfaction is a pleasurable or positive emotional feeling resulting from one's evaluation towards his/her job when comparing between what he/she expects and what he/she actually gains from his/her job (35, 43). Job satisfaction is considered as a result of the interaction of the employee and his/her perceptions towards his/her job and work environment that can affect commitment level (44). In this study, percentages mean scores for job satisfaction among health professionals related to perceived remuneration and promotion opportunity scale was 30.81%. Therefore, lower score indicate lower job satisfaction with the remuneration and promotion opportunity given. If health goals are going to be achieved there should be highly committed health human power, and paying fair wage, getting updated training and incentives may be one of the means to create such a committed health human power so as to be satisfied with their job.

The other factor which affects professional commitment of health professionals in this study was perceived organizational support related variable that was perceived work-life balance factor score (36.35%- maximum scale mean score). Several studies had also demonstrated that if employees are highly satisfied with the support of coworkers, supervisors, had *reasonable leisure time* derive high level of job satisfaction, they will be more likely to be committed to the organization and profession than not satisfied with their work-life balance (51, 24, 25, 52). The reason why satisfaction will lead to commitment is that a higher level of job satisfaction may lead to good work-life balance and reduction in stress (30). The focus on these two key concepts is, if employees are satisfied with leadership style and other components of organizational support they will be more committed to

increase the performance and productivity (53). According to the qualitative study done in Iran on health professionals by Fateme J. et al in 2013, work overload and stress create work-life imbalance so that sometimes had terrible consequences and challenging with different feelings (life and death situation) and role of the manager are the most important factors in development of professional commitment and affected by (3).

Organizational commitment related predictors of professional commitment were organizational affective (affection for job) commitment factor score and organizational normative (Sense of obligation to stay) commitment factor score. Related researches support this finding by phrasing the affective component (AC) is adoption of organizational goals and commitment to them and to have positive emotions related to identification with it. Similarly, normative commitment score was also predictor in an other study which occur when workers feel a sense of obligation to their organization, this sense of obligation can stem from several factors, they might feel that they should remain within the organization because it has invested in many ways and become committed professionally (5, 19, 34). This study resulted (%SM for AOC-52.25% and NOC-59.13%) which is almost consistent with the research done in India that point out 56.7% for AOC and 57.33% for NOC (9).

This study revealed that more than half of respondents reported a high-level of organizational (Affective) commitment which is above the AOC scale mean-52.5% (n=237,57.5%) but it is less than the study done by Barbara B. Brownat in Virginia/2003 (Almost two-thirds of respondents reported a high-level of organizational (Affective) commitment (n=326, 63.7%)). This difference may be due to remote facility location and infrastructure limitations in Jimma zone case that decreased their affection towards the organization. Two third of participants in this study (N=272, 66% ) agreed or strongly agreed that they were willing to put in a great deal of effort beyond that normally expected in order to help their organization be successful which is nearly supported by a research done on hospital workers (n=366,71.5%)(2).

This study revealed that professional commitment was found to be higher than their commitment to the organization (mean score of 30.28 to 47.88) (9.49 to 17.43). This finding supported by facility based cross sectional study done in India, doctors (mean score of 3.21 to 4.01) (3.01 to 3.61) were highly identified with their profession than organization. Our study included many other health professionals in addition to medical doctors (9).

Personal characteristics factor score was also one of the predictor of professional commitment that indicates being committed to ones' profession is more explained by personality like ethical practice, effective interactions with patients and with other people working in the healthcare system, commitment to autonomous maintenance and continuous improvement of competence, pride in profession & good behavior outside work. According to this finding, it is consistent with the result from longitudinal study done Norwegian Social Research (NOVA), Oslo, Norway, May/2011; the level of professional commitment was negatively associated with substance use like cannabis. When the respondents were in their mid-20 years, those who were involved or had experimented with cannabis displayed lower levels of work commitment than those who were abstaining or merely exposed to cannabis through friends ( $P<0.05$ ) (28).

The other variable in the final model as a predictor of professional commitment was perceived maternal health goal score which is strongly supported by the study done in Archdeacon, T. (1994) on predictors of nurses' commitment to their profession and organization, the majority of respondents reported a low-level of role conflict and role ambiguity due to shared vision about the goal what they had. Majority of them reported that they knew often or very often what their responsibilities were ( $n=447$ , 87.3%). Around three-quarters of respondents reported feeling certain about how much authority they had and felt that they had clear, planned goals and objectives for their jobs that affect level of commitment ( $n=391$ , 76.4%;  $n=374$ , 73.1%, respectively) (60). Another qualitative study done in Iran on nurses' support this finding "*I am committed to offer the best nursing care so that increase my commitment to this profession*". Hence, feeling responsibility is known as most important aspect of professional commitment that increases loyalty and tendency to remain in the profession. Therefore, professionals' perceptions towards the service goal and uptake status affect level of commitment to their profession (3).

The comparison test in this study revealed that professional commitment mean score of health professionals was significantly different between qualifications; diploma (% mean score=74.21) and postgraduate (% mean score=66.42) ( $p=0.049$ ). Similarly, other study revealed the same result, nurses with a bachelor degree and above reported a lower level of professional commitment compared to those with diploma ( $p<0.05$ ) (9, 14). This difference may be due the work that they expected to do and their qualification (as a degree holder) imbalance, because these degree holders that participated on interview working at health centers said that they are forgetting their skill due

to the routine activities, treating the same and common illness only, that is why level of commitment to their profession decreased compared to the diploma.

In the final model, perceived remuneration and promotion opportunity factor score was not significant predictor. This finding is in contradiction with both researches done on pharmaceutical organizations in England and nurses in Taiwan (57, 58). This may imply that health professionals in this study were more satisfied with short-term benefits like professional training than educational opportunity or career structures that are beneficial only in the long run. In this, study 'PCA' created remuneration and promotion opportunity as a one factor/scale but other studies considered as different two variables in the regression model. The difference in this regard may relate to the amount of pays and benefits in different settings and the perceived satisfaction response will depend on individual's differences. However, this finding support the hierarchy of need theory developed by Abraham Maslow in 1943 (21) and which states Peoples are motivated first by the lower level needs, and supported by a study done among hospital nurses in Malaysia found no relationship between the perceived level of pays and benefits with professional commitment (58).

Even though not significant predictors in the final model; gender, marital status and net monthly salary were predictors in an other studies (9,28). In fact, the meaning given for professional commitment may not need always these variables influence to be committed professional because it needs the mindset that is compassionate, careful and respectful to the client and proud with ones' profession. However, several earlier qualitative and quantitative studies including research done on health care sector in Iran found significant relationships between these socio-demographic variables and professional commitment (27, 28, 54). These early studies assumed higher work experience or higher age might bring too much benefit such as high salary and position to the employee that influence their commitment. The absence of significant association in this study might imply benefits difference due to age or years of experience in this study setting may be nil but there are mean score differences between professions and qualifications significantly.

### **6.3. Limitations of the Study**

Some of the limitations of the study were social desirability bias and information bias (the information obtained was dependent on the participants' self-report or perception responses) as well as the study not identify cause and effect relationship rather merely predictors of professional commitment. The tool was comprised of both positive and negative statements that enhance their concentration to minimize their biased response.

It was limited in quantifying and judgmental error on qualitative response, regarding measurement validity and the professional commitment measuring items with 5-point Likert scale might be subjectively interpreted. The tool was subjected to information contamination by mood and attitude of co-workers that was controlled by informing participants to complete privately and giving reasonable short time. Respondents to the various measures participated voluntarily so the effect of potential systematic bias in non-responses was unknown but worked to minimize non-response rate.

## **Chapter Seven: Conclusion and Recommendation**

### **7.1. Conclusions**

The percentages mean score (%SM) of professional commitment of health professionals working in government health facilities of Jimma zone was medium. Job satisfaction was an important predictor of professional commitment. More specifically, perceived staff interaction was a predictor of professional commitment. In addition to this, the presence of balanced work-life time has important positive impact on the professional commitment as one of the variable from perceived organizational support. Organizational commitment had great influence on professional commitment. Specifically, affective and normative organizational commitment score affect the level of professional commitment positively.

Personal characteristics was the strongest predictor of professional commitment. The last but not least, from the predictors of professional commitment, perceived maternal health goal affect the level of commitment significantly. Finally, we can conclude that professional commitment was much more influenced by organizational related factors than personal factors by contributing many predictor variables that can affect outcome of interest.

## 7.2 Recommendations

Taking into account what had been outlined in this study, we would like to forward the following recommendations to all concerned bodies:-

1) For health managers in Jimma zone;

- Health managers at all levels in the zone should work to increase the number of health professionals and not obligating professionals to work over time to minimize the workload to have balanced work-life time in government health facilities.
- It is better if health managers at all levels should value the efforts, care and concern for the wellbeing of health professionals working in government health facilities in the zone to increase their affection and sense of belongingness towards the facility that affect their commitment.
- From zonal to lower level of management, (Zonal/Woreda/facility) maternal health goal (SDG) plan should be communicated and updated to all professionals to have shared vision towards increasing uptake of institutional delivery service with regular performance feedback.

2) For policy makers/planners

- The Oromia regional health Bureau, Jimma zone health department and each woreda health offices in the zone are recommended to prepare guideline and enforcing the practice on how to manage formal staff interaction to have professionally committed health workforce.
- The Oromia regional health Bureau, Jimma zone health department and each woreda health offices in the zone should work on professionals to have those who love their organization and have strong sense of obligation to stay in that facility that can affect their professional commitment.
- The Oromia regional health Bureau, Jimma zone health department and each woreda health offices in the zone should work on the first degree and post graduates especially on emergency surgery and obstetricians (ESO) to increase their commitment by assigning to the appropriate facility/job that need/fit their skill to minimize their focus from routine activities.

3) For each health facilities

- It would be better if each health facilities' management bodies design programs that increase the staff interaction of health professionals working under their jurisdiction and arranging formal/informal communication between workers to develop good/positive relationship.



- The facility heads and immediate leaders should respect the autonomy of professional at work place to have freedom to chose and decide their own working methods, to be fully accountable for their decisions and the freedom they have to work alone on the job as per the rules and regulation of facility in line with professional ethics.
- Each health facility should have its own rules and regulation to manage personal characteristics about substance use, punctuality, responsibility and accountability, client-centeredness, absenteeism and other personal related issues.

4) For health professionals

- All health professional should manage their own personal characteristics to behave in good way to be compassionate, respectful, caring for clients and be committed for their profession.

5) For researchers

- Further research is needed on the relationship between other human resources management practices and professional commitment of health professionals.
- We recommend investigating on inverse relationship between continuance organizational commitment and professional commitment as well as between perceived remuneration and promotion opportunity, and perceived work env't/setting and professional commitment.

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## **Annexes**

### **Annex I: Information Sheet, Instruction and Consent Form**

Jimma University

College of Health Sciences

Department of Health Economics, Management, and Policy

Self-administered questionnaire prepared for all eligible health professionals' working in Jimma Zone gov't health facilities to assess level of health professionals' commitment to increase uptake of institutional delivery services and associated factors in government health facilities of Jimma zone, Oromia, Southwest Ethiopia, from March 1-20/2016.

Title of study: level of health professionals' commitment to increase uptake of institutional delivery service and associated factors in government health facilities of Jimma zone, 2016

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Research Advisors: Mr. Shimeles Ololo and Mr. Gebeyehu Tsega

Dear health professionals,

I am writing to invite you to participate in a research study on health professionals' commitment and associated factors

I am a public health and master's student in Jimma University conducting research on how health professionals view their work and their level of commitment to their profession. Such research has been done in other countries but not in Ethiopia especially on the health professionals work environment. I'm inviting you to participate as you are a member of health professionals working in Jimma zone public health facilities.

Before you decide whether to take part, it is important for you to understand why the research is being done.

This study is being conducted for the partial fulfillment of my Master's degree in Jimma University and not for other purpose. It has got ethical approval from the Ethical Review Committee of the collage of health sciences of Jimma University. It is being conducted among health professionals in governmental health facilities of Jimma zone, Oromia region.

The aim of this study is to assess professional commitment and its predictors among health professionals working in governmental health facilities of Jimma zone. That is why we contact you to take part in the study.

All information that is collected from you during the study will be kept confidential, and your name will never be mentioned in any analysis and dissemination of findings. Taking part in this study is completely voluntary based. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify. However, the honest information you give us is highly valuable to the study and it has 6 parts that will take about 25-30 minutes. I am grateful to you for your consideration of this research and look forward to your response!

I have read all the information on the aims of the study and I understood that participation in this study is completely voluntary and that I can withdraw from the study any time while completing the questionnaires without supplying reason. I'm fully aware that the results of this study will be used for scientific purpose and may be published. I agree to this, provided my privacy is guaranteed.

I hereby give consent to participate in this study.

\_\_\_\_\_ Yes, I want to participate in the study (administer the questionnaire)

\_\_\_\_\_ No, I don't want to participate in the study (thank you very much!)

## **Annex II: Data collection tool/ questionnaire**

### **Part I: Socio-demographic and economic characteristics of the participants**

1. Your gender 1. Female 2. Male
2. Your age \_\_\_\_\_ (years)
3. Marital status
  1. Single
  2. Married
  3. Divorced
  4. Widowed
4. Your profession \_\_\_\_\_ (currently you are working)
5. What is your qualification?
  1. Diploma
  2. Bachelor degree
  3. Post graduate (masters holder or specialty certificate....)
6. How long have you worked at this health facility? \_\_\_\_\_ years
7. Area of residence 1. Urban 2. Rural
8. You are working in? 1. Health center 2. Hospital
9. Type of position
  1. Managerial
  2. Non-managerial (no any involvement in administrative)
10. Net monthly salary you earn \_\_\_\_\_ (ET /birr/)

## Part II: Job satisfaction questions

How satisfied are you with the following aspects of your current job? Please circle the number that applies your current satisfaction level in front of each question/item. The items are scored as 1 = Very dissatisfied, 2 = Dissatisfied, 3= Uncertain, 4 = Satisfied ,5 = Very Satisfied .

| No | Sub-components and items   | Very Dissatisfied | Dissatisfied | Uncertain | Satisfied | Very Satisfied |
|----|--|-------------------|--------------|-----------|-----------|----------------|
|    | <b>1. Remuneration/Payment</b>   |                   |              |           |           |                |
| 1  | With your income as a reflection of the work you do  | 1                 | 2            | 3         | 4         | 5              |
| 2  | Compensation you get for working weekends  | 1                 | 2            | 3         | 4         | 5              |
| 3  | With your job advantages rather than disadvantage  | 1                 | 2            | 3         | 4         | 5              |
|    | <b>2. Promotion opportunity</b>  |                   |              |           |           |                |
| 4  | Existence of enough support for continuing education                                       | 1                 | 2            | 3         | 4         | 5              |
| 5  | Sufficient opportunity you have for professional growth                                    | 1                 | 2            | 3         | 4         | 5              |
| 6  | Support for Personal growth and development through education and training you get         | 1                 | 2            | 3         | 4         | 5              |
|    | <b>3. Recognition (leadership style)</b>   |                   |              |           |           |                |
| 7  | Adequate Consideration given to your opinion and suggestion for change in the work setting | 1                 | 2            | 3         | 4         | 5              |
| 8  | Recognition you receive for tasks well done  | 1                 | 2            | 3         | 4         | 5              |
| 9  | Adequate consideration given to your personal needs  | 1                 | 2            | 3         | 4         | 5              |
|    | <b>4. Professional training</b>  |                   |              |           |           |                |
| 10 | With the training opportunities available to you   | 1                 | 2            | 3         | 4         | 5              |
| 11 | Training programs appropriate to enhance your professional job performance                 | 1                 | 2            | 3         | 4         | 5              |
| 12 | Your organization gives training and orientation to new staffs well                        | 1                 | 2            | 3         | 4         | 5              |
|    | <b>5. Autonomy (leadership style)</b>  |                   |              |           |           |                |
| 13 | Freedom to chose and decide your own working methods                                       | 1                 | 2            | 3         | 4         | 5              |
| 14 | Support given to be fully accountable for your decisions                                   | 1                 | 2            | 3         | 4         | 5              |
| 15 | The freedom you have to work alone on the job  | 1                 | 2            | 3         | 4         | 5              |
|    | <b>6. Interaction and working environment</b>  |                   |              |           |           |                |
| 16 | Good working relationship you have with your colleagues                                    | 1                 | 2            | 3         | 4         | 5              |
| 17 | Existence of clear channel of communication at your workplace                              | 1                 | 2            | 3         | 4         | 5              |
| 18 | By your dependency on your colleagues for support  | 1                 | 2            | 3         | 4         | 5              |
| 19 | Atmosphere of co-operation between staff & management                                      | 1                 | 2            | 3         | 4         | 5              |
| 20 | Management involve staff in decision making  | 1                 | 2            | 3         | 4         | 5              |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 21 | Working environment encourage you to make adjustment in your professional practice to suit patient needs | 1 | 2 | 3 | 4 | 5 |
| 22 | Sufficient time you have for each clients  | 1 | 2 | 3 | 4 | 5 |
| 23 | The physical conditions in which you work and supplies to your job                                       | 1 | 2 | 3 | 4 | 5 |

### Part III: Perceived organizational support questions

By considering the items' score as strongly disagree=1, disagree=2, neutral=3, agree=4 and strongly agree=5. Please circle the number that applies your current perceived organizational support level in front of each question/item.

| No | Sub-components and items   | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|----|--|-------------------|----------|---------|-------|----------------|
|    | <b>1. Value and care for employee</b>  |                   |          |         |       |                |
| 1  | The organization values my contribution to its well-being                      | 1                 | 2        | 3       | 4     | 5              |
| 2  | The organization fails to appreciate any extra effort from me(R)               | 1                 | 2        | 3       | 4     | 5              |
| 3  | The organization would ignore any complaint from me(R)                         | 1                 | 2        | 3       | 4     | 5              |
| 4  | The organization really cares about my well-being                              | 1                 | 2        | 3       | 4     | 5              |
|    | <b>2. Concern for employee</b>   |                   |          |         |       |                |
| 5  | Even if I did the best job possible, the organization would fail to notice (R) | 1                 | 2        | 3       | 4     | 5              |
| 6  | The organization cares about my general satisfaction at work                   | 1                 | 2        | 3       | 4     | 5              |
| 7  | The organization shows very little concern for me (R)                          | 1                 | 2        | 3       | 4     | 5              |
| 8  | The organization takes pride in my accomplishments at work                     | 1                 | 2        | 3       | 4     | 5              |
|    | <b>3. Work life balance</b>  |                   |          |         |       |                |
| 9  | I have sufficient time to undertake both my job and family related issues      | 1                 | 2        | 3       | 4     | 5              |
| 10 | I have reasonable leisure time   | 1                 | 2        | 3       | 4     | 5              |
| 11 | The facility provides good health care service to my family                    | 1                 | 2        | 3       | 4     | 5              |
| 12 | Working env't doesn't affect my personal health conditions                     | 1                 | 2        | 3       | 4     | 5              |
| 13 | I work under less stressful situation  | 1                 | 2        | 3       | 4     | 5              |
| 14 | I have friendly relationship with my colleagues                                | 1                 | 2        | 3       | 4     | 5              |
| 15 | My work load don't affect my personal life                                     | 1                 | 2        | 3       | 4     | 5              |
| 16 | My job permits me to undertake my social obligations                           | 1                 | 2        | 3       | 4     | 5              |
|    | <b>4. Human resource policy and practice</b>                                   |                   |          |         |       |                |
| 17 | There is clear promotion policy at my facility                                 | 1                 | 2        | 3       | 4     | 5              |
| 18 | There is a consistent /unbiased application of promotion policy                | 1                 | 2        | 3       | 4     | 5              |
| 19 | There is a transfer policy that guarantee easy transfer to other facility      | 1                 | 2        | 3       | 4     | 5              |
| 20 | The transfer policy is consistent and fair                                     | 1                 | 2        | 3       | 4     | 5              |



|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 21 | There is clear policies and procedures on how to evaluate employees' performance                               | 1 | 2 | 3 | 4 | 5 |
| 22 | There is clear training and development policy   | 1 | 2 | 3 | 4 | 5 |
| 23 | There is fair training and development policy  | 1 | 2 | 3 | 4 | 5 |
|    | <b>5. Compensation &amp; benefit payment</b>   |   |   |   |   |   |
| 24 | If I have a question about payment and benefit, I can get answer quickly, accurately & easily                  | 1 | 2 | 3 | 4 | 5 |
| 25 | My pay is about the same as or better than I would receive if I were doing the same work at other organization | 1 | 2 | 3 | 4 | 5 |
| 26 | I feel that I am paid fairly compared to the market and changes in payment made fairly                         | 1 | 2 | 3 | 4 | 5 |
|    | <b>6. Location of facility</b>   |   |   |   |   |   |
| 27 | The location of facility gives me an opportunity to generate additional income                                 | 1 | 2 | 3 | 4 | 5 |
| 28 | The cost of life where the facility is located is fair   | 1 | 2 | 3 | 4 | 5 |
| 29 | The weather condition where the facility located is conducive for living                                       | 1 | 2 | 3 | 4 | 5 |
| 30 | There is sufficient infrastructure in the place where the facility is located                                  | 1 | 2 | 3 | 4 | 5 |

**Part IV/A: Professional commitment questions (to be scored as follows)**

Strongly disagree=1, disagree=2, neutral=3, agree=4 and strongly agree=5. Please circle the number that applies your current professional commitment level in front of each question/item.

| <b>N<br/>o</b> | <b>Items</b>  | <b>Strongly<br/>disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly<br/>agree</b> |
|----------------|---|------------------------------|-----------------|----------------|--------------|---------------------------|
| 1              | I am willing to put in a great deal of effort to develop my profession beyond expected                      | 1                            | 2               | 3              | 4            | 5                         |
| 2              | I am a person who identifies strongly with my profession  | 1                            | 2               | 3              | 4            | 5                         |
| 3              | I would accept almost any type of job that related to my profession to keep working beyond expected from me | 1                            | 2               | 3              | 4            | 5                         |
| 4              | I am a person who feels strong ties with other members of my profession                                     | 1                            | 2               | 3              | 4            | 5                         |
| 5              | I am a person who is proud to belong to my profession   | 1                            | 2               | 3              | 4            | 5                         |
| 6              | My profession really inspires the very best in me in the way of job performance.                            | 1                            | 2               | 3              | 4            | 5                         |
| 7              | I am extremely glad that I chose this profession to work for ever in  | 1                            | 2               | 3              | 4            | 5                         |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
|    | advance  |   |   |   |   |   |
| 8  | I am a person who criticizes my profession (R)                 | 1 | 2 | 3 | 4 | 5 |
| 9  | I am a person who considers my profession to be important      | 1 | 2 | 3 | 4 | 5 |
| 10 | I am a person who tries to hide belonging to my profession (R) | 1 | 2 | 3 | 4 | 5 |

**Part IV/B: Organizational commitment questions (to be scored as follows)**

Strongly disagree=1, disagree=2, neutral=3, agree=4 and strongly agree=5. Please circle the number that applies your current organizational commitment level in front of each question/item.

| No | Sub-components and items  | disagree | Disagree | Neutral | Agree | Strongly agree |
|----|---|----------|----------|---------|-------|----------------|
|    | <b>1. Affective Commitment</b>  |          |          |         |       |                |
| 1  | I would be very happy to spend the rest of my career with this organization   | 1        | 2        | 3       | 4     | 5              |
| 2  | I enjoy discussing about my organization with people outside it   | 1        | 2        | 3       | 4     | 5              |
| 3  | I really feel as if this organization's problems are my own   | 1        | 2        | 3       | 4     | 5              |
| 4  | I think that I could easily become attached to another organization as I am to this one   | 1        | 2        | 3       | 4     | 5              |
| 5  | I feel like 'part of the family' at my organization   | 1        | 2        | 3       | 4     | 5              |
| 6  | I feel 'emotionally attached' to this organization  | 1        | 2        | 3       | 4     | 5              |
| 7  | This organization has a great deal of personal meaning for me   | 1        | 2        | 3       | 4     | 5              |
| 8  | I feel a 'strong' sense of belonging to my organization   | 1        | 2        | 3       | 4     | 5              |
|    | <b>2. Continuance Commitment</b>  |          |          |         |       |                |
| 9  | I am not afraid of what might happen if I quit my job without having another one lined up (R)   | 1        | 2        | 3       | 4     | 5              |
| 10 | It would be very hard for me to leave my organization right now, even if I wanted to  | 1        | 2        | 3       | 4     | 5              |
| 11 | Too much in my life would be disrupted if I decided to leave my organization now  | 1        | 2        | 3       | 4     | 5              |
| 12 | It would be too costly for me to leave my organization now  | 1        | 2        | 3       | 4     | 5              |
| 13 | Right now, staying with my organization is a matter of necessity as much as desire  | 1        | 2        | 3       | 4     | 5              |
| 14 | I feel that I have very few options to consider leaving this organization   | 1        | 2        | 3       | 4     | 5              |
| 15 | One of the few serious consequences of leaving this organization would be the scarcity of available alternatives  | 1        | 2        | 3       | 4     | 5              |
| 16 | One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice—another organization may not match the overall benefits I have here | 1        | 2        | 3       | 4     | 5              |
|    | <b>3. Normative Commitment</b>  |          |          |         |       |                |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 17 | I don't think that people these days move from facility to facility too often  | 1 | 2 | 3 | 4 | 5 |
| 18 | I believe that a person must always be loyal to his or her organization  | 1 | 2 | 3 | 4 | 5 |
| 19 | Jumping from organization to organization seem at all unethical to me  | 1 | 2 | 3 | 4 | 5 |
| 20 | One of the major reasons I continue to work in this organization is that I believe loyalty is important and therefore feel a sense of moral obligation to remain | 1 | 2 | 3 | 4 | 5 |
| 21 | For me this is the best of all possible organizations for which to work.   | 1 | 2 | 3 | 4 | 5 |
| 22 | I was taught to believe in the value of remaining loyal to one organization  | 1 | 2 | 3 | 4 | 5 |
| 23 | Things were better in the days when people stayed in one organization for most of their careers  | 1 | 2 | 3 | 4 | 5 |
| 24 | I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful                                     | 1 | 2 | 3 | 4 | 5 |

**Part V: Personal characteristics questions (to be scored as follows)**

Strongly disagree=1, disagree=2, neutral=3, agree=4 and strongly agree=5. Please circle the number that applies your current Personal characteristics level in front of each question/item.

| No | Items  | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|----|--|-------------------|----------|---------|-------|----------------|
| 1  | I believe that using any type of addictive substance has negative effect on one's professional role                    | 1                 | 2        | 3       | 4     | 5              |
| 2  | I am always on time for work   | 1                 | 2        | 3       | 4     | 5              |
| 3  | The exposure to life and death situation makes me stressed that affect my performance                                  | 1                 | 2        | 3       | 4     | 5              |
| 4  | My work load is beyond what others had that made me more committed to my profession                                    | 1                 | 2        | 3       | 4     | 5              |
| 5  | I may not face difficulty to give the service for delivering mother's in a skilled way                                 | 1                 | 2        | 3       | 4     | 5              |
| 6  | I feel as I am motivated to give the service up to my professional level to prevent maternal death while she give life | 1                 | 2        | 3       | 4     | 5              |
| 7  | I feel as I am responsive/client-centered in my profession   | 1                 | 2        | 3       | 4     | 5              |
| 8  | I believe that the end (outcome) justifies the means in providing services ,I am outcome-oriented                      | 1                 | 2        | 3       | 4     | 5              |
| 9  | I may not be absent from work even if I faced difficult problem  | 1                 | 2        | 3       | 4     | 5              |
| 10 | I and my co-workers feel about me as I am being responsible and accountable for my action                              | 1                 | 2        | 3       | 4     | 5              |

**Part VI: Institutional delivery service and maternal goal related questions (to be scored as follow)**

Strongly disagree=1, disagree=2, neutral=3, agree=4 and strongly agree=5. Please circle the number that applies your current Institutional delivery service and organizational goal uptake related issues in front of each question/item.

| <b>No</b> | <b>Items</b>  | <b>Strongly disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly agree</b> |
|-----------|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1         | I think at national level, the maternal health goal is over ambitious so it is difficult to achieve (R)   | 1                        | 2               | 3              | 4            | 5                     |
| 2         | At my facility level, the planed objective on institutional delivery service is achievable, measurable and realizable (SMART)                                     | 1                        | 2               | 3              | 4            | 5                     |
| 3         | At my facility as well as in health sector we had shared vision towards delivery service provision to be increased so as to reduce maternal morbidity & mortality | 1                        | 2               | 3              | 4            | 5                     |
| 4         | There is periodic, reasonable feedback to my performance  | 1                        | 2               | 3              | 4            | 5                     |
| 5         | I believe 'home delivery free kebeles' motto may increase uptake of institutional delivery services   | 1                        | 2               | 3              | 4            | 5                     |
| 6         | At my health facility, delivery service providers' case team approach is well organized.  | 1                        | 2               | 3              | 4            | 5                     |
| 7         | I feel the facility level rules and regulations are not respected in line with professionals' ethics (R)  | 1                        | 2               | 3              | 4            | 5                     |
| 8         | I think those professionals' who are negligent in delivery service provision should be punished and dismissed from that profession legally                        | 1                        | 2               | 3              | 4            | 5                     |

### **Annex III: Data collection tool/ In-depth interview guide**

#### **Research team on health professionals' commitment in Jimma zone, 2016**

Interview guide prepared for in-depth interview with zone health department managers, woreda health office heads, human resource managers at woredas and health facilities and zonal health human resource managers.

#### **Introduction**

We are from Jimma University and conducting data collection for a research project, the partial fulfillment of master of public health of Yibeltal Siraneh. The aim of this research is to assess the level of health professionals' commitment and associated factors in government health facilities of Jimma zone. To this end we are seeking your thoughts, comments and suggestions on relevant issues that will be raised by us about your zone/woreda/health facility and also your suggestions to improve level of commitment among the professionals. As one of the health managers in the zone we expect that your views are very useful in getting a better understanding of the issues raised above. Hence, we cordially invite you to be one of the interviewees in this assessment.

The interview will not take more than 45 minutes. All the information you provide will be anonymously kept and be used only for the purpose of the academic requirement. The recorded interview will be destroyed immediately after transcription.

Shall I proceed? To take your oral consent

1) Yes \_\_\_\_\_

2) No \_\_\_\_\_

Background information

- Age \_\_\_\_\_ Sex \_\_\_\_\_ Position \_\_\_\_\_ Year of Service at this position \_\_\_\_\_

Questions to throw:

1. How do you rate the professional commitment of health workforce in your health facility/woreda/zone health office?

Follow up:

-Can you explain it more? What tangible evidences could you provide to support your view?

-would you explain it with regard to the effort made to increase uptake of IDS?

2. What factors do you think affect their commitment level towards increasing uptake of IDS?

Follow up:

Please, explain how each of these factors is related to the level of organizational and professional commitment.

3. What do you suggest to improve the commitment level of health professionals in your health facility / woreda/zone health office?

Follow up:

Which of your suggestions are currently being implemented in health facility /woreda/ zone?

Can you mention practical gains obtained following implementation of some of your suggestions?

Given the current health and health related policies in the country, what are the challenges and opportunities you have noticed for improving professional commitment in your health facility /woreda/ zone health office? To increase uptake of IDS

4. Is there anything else you would like to add?

Follow up: .....Please give examples...Thanks a lot!



1=በፍጹም አልረካሁም፣ 2= አልረካሁም ፣ 3=አሻሚ ነው፣ 4= ረከቻለሁ፣ 5=በጣም ረከቻለሁ

| ተ. ቁ | መጠይቆች በዩክፍላቸው   | በፍጹም አልረካሁም | አልረካሁም | አሻሚ ነው | ረከቻለሁ | በጣም ረከቻለሁ |
|------|---|-------------|--------|--------|-------|-----------|
|      | <b>1. ክፍያን በተመለከተ</b>                                   |             |        |        |       |           |
| 1    | የሚከፈልዎ ክፍያ ከሚከፈሉት ሥራ ጋር ተመገጥኝ ስለመሆኑ                     | 1           | 2      | 3      | 4     | 5         |
| 2    | በአረፍት ሰዓትዎ ሰለሩ ማካካሻ ክፍያን በተመለከተ                         | 1           | 2      | 3      | 4     | 5         |
| 3    | ስራዎ ከጉዳቱ ጥቅሙ ስለማዛኑ/ስለመበለጡ                               | 1           | 2      | 3      | 4     | 5         |
|      | <b>2. የደረጃ እድገትን በተመለከተ</b>                             |             |        |        |       |           |
| 4    | ተከታታይ ትምህርት እንዲሟዱ ድጋፍ ስለመደረጉ                            | 1           | 2      | 3      | 4     | 5         |
| 5    | የደረጃ እድገት እንዲያገኙ በቂ እድል ስለመጣቸው                          | 1           | 2      | 3      | 4     | 5         |
| 6    | በትምህርትና በስልጠና እራስዎን እንዲያሳድጉና እንዲያሻሽሉ ድጋፍ ስለመደረጉ         | 1           | 2      | 3      | 4     | 5         |
|      | <b>3. እውቅናን በተመለከተ</b>                                  |             |        |        |       |           |
| 7    | በሥራ ወቅት ስለሚቀርቡት አስተያየት ወይም ሀሳብ በቂ ትኩረት ስለመሰጠቱ           | 1           | 2      | 3      | 4     | 5         |
| 8    | በጥሩ ሁኔታ ላከናወኑዎቸው ተግባራት ዕውቅና ስለመገኘትዎ                     | 1           | 2      | 3      | 4     | 5         |
| 9    | ግለሰባዊ ፍላጎትዎ ከግንዛቤ ወስጥ ስለመገባቱ                            | 1           | 2      | 3      | 4     | 5         |
|      | <b>4. ጥያቄ ስልጠናን በተመለከተ</b>                              |             |        |        |       |           |
| 10   | ስልጠና የሚገኝበት ዕድል ስለመጣቸው                                  | 1           | 2      | 3      | 4     | 5         |
| 11   | የሚከፈልዎት ስልጠናዎች ጥያቄ የሥራ አፈፃፀምዎን ለማሻሻል የሚረዱ ስለመሆናቸው       | 1           | 2      | 3      | 4     | 5         |
| 12   | መሥሪያቤትዎ ለአዳዲስ ሠራተኞች በቂ የሆነ የመገቢያ ስልጠናና አቅጣጫዎች ስለመሰጠቱ    | 1           | 2      | 3      | 4     | 5         |
|      | <b>5. በራስ የመወሰን መብት በተመለከተ</b>                          |             |        |        |       |           |
| 13   | ስራዎን እንዴት መሰራት እንዳለብዎት የመወሰን ነፃነትን በተመለከተ               | 1           | 2      | 3      | 4     | 5         |
| 14   | ስለወሰኑት ወሳኔ ሙሉ ተጠያቂ የመሆን ድጋፍ ስለመደረጉ                      | 1           | 2      | 3      | 4     | 5         |
| 15   | ስራዎችን በራስዎ አቅም የማከናወን ነፃነት ስለመሰጠቱ                       | 1           | 2      | 3      | 4     | 5         |
|      | <b>6. በስራ ቦታዎ ከሰዎች ጋር ያለዎት ግንኙነትና የሥራ ቦታ ሁኔታ በተመለከተ</b> |             |        |        |       |           |
| 16   | ከሥራ ባልደርቦችዎ ጋር ስራን በተመለከተ ጥሩ ግንኙነት ስለመኖሩ                | 1           | 2      | 3      | 4     | 5         |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 17 | በሥራ ቦታዎ ቀጥተኛና ግልፅ የመገባቢያ ሥርዐት ስለመኖሩ                    | 1 | 2 | 3 | 4 | 5 |
| 18 | ከሥራ ባልደረቦችዎ ጋር በስራ ቦታ ጥሩ የመተጋገዝ መንፈስ ስለመኖሩ             | 1 | 2 | 3 | 4 | 5 |
| 19 | በአስተዳደርና በሰራተኛ መሀል ጥሩ የመተባበር መንፈስ ስለመኖሩ                | 1 | 2 | 3 | 4 | 5 |
| 20 | አስተዳደሩ በወሳኔ አሰጣጥ ሂደት ላይ ሰራተኛን ስለመክተፉ                   | 1 | 2 | 3 | 4 | 5 |
| 21 | የስራ ቦታዎ የታካሚዎችን ፍላጎት ለመርካት መቻላቸውን ለመጥራት ለመቻላቸው ስለመሆናቸው | 1 | 2 | 3 | 4 | 5 |
| 22 | እያያዳንዳቸውን ደንበኞች የመግቢያ ግዳታ በቂ ጊዜ ስለመኖሩ                  | 1 | 2 | 3 | 4 | 5 |
| 23 | በግብአት ዕጥረት ምክንያት ስራዎ ተደናቅፎ ባለመሆኑ                       | 1 | 2 | 3 | 4 | 5 |

**ክፍል ሦስት**

**መሥሪያ ቤትዎ ያደርግልኛል ብለው ስለሚገቡት ድጋፍ ያልዎትን አስተያየት የሚዘኩ ጥያቄዎች**

እያንዳንዳን ነጥብ ከግምት ውስጥ በማስገባት በሚከተለው ደረጃ መሰረት የአርስዎን አቋም የሚከለው አንዱን ቁጥር ያክብቡት

በፍጹም አልሰማም = 1፣ አልሰማም = 2፣ ገለልተኛ አቋም = 3፣ እስማላሁ = 4፣ በጣም እስማላሁ = 5

| ተ. ቁ | መጠይቆች በዩክፍላቸው                                     | በፍጹም አልሰማም | አልሰማም | ገለልተኛ | እስማላሁ | በጣም እስማላሁ |
|------|---|------------|-------|-------|-------|-----------|
|      | <b>1. መሰሪያ ቤቱ ስለሚጠየቀው ዋጋና እሳቤ</b>                 |            |       |       |       |           |
| 1    | ለመሰሪያ ቤቱ ደህነት የማጠራጠሪያውን አስተዋፅኦ ዋጋ ይሰጠዋል           | 1          | 2     | 3     | 4     | 5         |
| 2    | ለመሰሪያ ቤቱ በተጨማሪ ጥሬ የማጠራጠሪያውን ነገሮች አይረዳልኝም          | 1          | 2     | 3     | 4     | 5         |
| 3    | መሥሪያ ቤቱ ለማቅረባቸው እርሮዎች ቦታ አይሰጥም                    | 1          | 2     | 3     | 4     | 5         |
| 4    | መሥሪያ ቤቱ ስለደህንነቱ ያስባል ጥንቃቄዎ ያደርጋል                  | 1          | 2     | 3     | 4     | 5         |
|      | <b>2. የመሰሪያ ቤቱ ያገባኛልነት (በርስዎ ላይ)</b>              |            |       |       |       |           |
| 5    | ምንም እንኳን ስራዬን በተሻለ ሁኔታ ባከናወንም መሰሪያ ቤቱ ግን አያስተዋለወም | 1          | 2     | 3     | 4     | 5         |
| 6    | መሰሪያ ቤቱ በአጠቃላይ በስራዬ እንድረካ እንክብካቤ ያደርግልኛል          | 1          | 2     | 3     | 4     | 5         |
| 7    | መሰሪያ ቤቱ ለእኔ ያለው ትኩረት አናሳ ነው                       | 1          | 2     | 3     | 4     | 5         |
| 8    | መሰሪያ ቤቱ ስራን በትክክል በማከናወን ችለዎታል ይተማማኝብኛል           | 1          | 2     | 3     | 4     | 5         |
|      | <b>3. የግል ህይወትና ስራን ከማምጣት አንጻር</b>                |            |       |       |       |           |
| 9    | ስራዬንና ከቤተሰብ ጋር የተያያዙ ሁኔታዎችን ለማከናወን በቂ ጊዜ አለኝ      | 1          | 2     | 3     | 4     | 5         |



|                               |   |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|---|
| 10                            | ትሩ/በቂ የሚባል የመዝናኛ ጊዜ አለኝ   | 1 | 2 | 3 | 4 | 5 |
| 11                            | ጠፍ ተቋሙ ለቤተሰቦቼ ጥሩ የሆነ የጠፍ አገልግሎት ይሰጣል  | 1 | 2 | 3 | 4 | 5 |
| 12                            | የምስራብት አካባቢ የግል የጠፍ ሁኔታዬን አይጎዳም   | 1 | 2 | 3 | 4 | 5 |
| 13                            | ስራዬን የምስራው በሙያ ጭንቅ/ወጥረት ባልተሞላበት ሁኔታ ነው                                      | 1 | 2 | 3 | 4 | 5 |
| 14                            | ከባንደረቦቼ ጋር የጓደኝነት ቀረቤታ/ ግንኙነት አለኝ   | 1 | 2 | 3 | 4 | 5 |
| 15                            | የስራ ጭዬ የግል ሂደቴን አይጎዳም/አይጫወትም  | 1 | 2 | 3 | 4 | 5 |
| 16                            | ስራዬ የሚሰጠው ግደታዬን አንድወጣ ይፈቅድልኛል (ከጊዜ አንፃር)                                    | 1 | 2 | 3 | 4 | 5 |
| <b>4. የሰው ሀብት ፖሊሲና አተገባበር</b> |   |   |   |   |   |   |
| 17                            | በጠፍ ተቋሙ ግልፅ የሆነ የደረጃ እድገት ፖሊሲ አለ  | 1 | 2 | 3 | 4 | 5 |
| 18                            | የደረጃ እድገት ፖሊሲው ሲተገበር ወጥና አድልዎ የለለበት ነው                                      | 1 | 2 | 3 | 4 | 5 |
| 19                            | የዝወወር ፖሊሲው ወደሌላ ተቋም በቀላሉ እንደዘዋወር ያረጋግጣል                                     | 1 | 2 | 3 | 4 | 5 |
| 20                            | የዝወወር ፖሊሲውም ግልፅና ፍትህዊ ነው  | 1 | 2 | 3 | 4 | 5 |
| 21                            | የሰራተኞችን አፈፃፀም ለመገምገም ግልፅ የሆነ ፖሊሲ እና ስርዓት አለ                                 | 1 | 2 | 3 | 4 | 5 |
| 22                            | ግልፅ የሆነ የስልጠናና የእድገት ፖሊሲ አለ   | 1 | 2 | 3 | 4 | 5 |
| 23                            | ፍትህዊ የሆነ የስልጠናና የእድገት ፖሊሲ አለ  | 1 | 2 | 3 | 4 | 5 |
| <b>5. ማከካሻና የጥቅማጥቅም ሜቀፍ</b>   |   |   |   |   |   |   |
| 24                            | ስለክፍያና ጥቅማጥቅም ጥያቄ ቢኖረኝ፤ ፈጣን፤ ትክክለኛና ቀላል የሆነ ምላሽ አገኛለሁ                       | 1 | 2 | 3 | 4 | 5 |
| 25                            | እዚህ የሚከፈለኝ ክፍያ፤ በሌላ ተቋም ወስጥ በተመሳሳይ ሁኔታ ብሰራ የሚከፍሉኝን ያክላል ወይም ይበልጣል እንጅ አያንስም | 1 | 2 | 3 | 4 | 5 |
| 26                            | ገበያ ላይ ከሚሞከረው ሁኔታ ሲነፃፀር የሚከፈለኝ ክፍያ ፍትህዊ ሲሆን የክፍያ ለወጥ ሲደረግም ተመገኝ ነው          | 1 | 2 | 3 | 4 | 5 |
| <b>6. የመሰሪያ ቤቱ መገኛ</b>        |   |   |   |   |   |   |
| 27                            | የምስራብት ተቋም የሚኝበት ቦታ፤ ተጨማሪ ገቢ እንዳገኝ እድል ፈጥሮልኛል                               | 1 | 2 | 3 | 4 | 5 |
| 28                            | የምስራብት ተቋም በሚኝበት ቦታ፤ የኑሮ ወደጎት ፍትህዊ ነው                                       | 1 | 2 | 3 | 4 | 5 |
| 29                            | የምስራብት ተቋም በሚኝበት ቦታ፤ የአጭር ሁኔታው ለኑሮ ተስማሚ ነው                                  | 1 | 2 | 3 | 4 | 5 |
| 30                            | የምስራብት ተቋም በሚኝበት አካባቢ፤ በቂ መሰረተ ልማቶች ተዘርግተዋል                                 | 1 | 2 | 3 | 4 | 5 |

**ክፍል አራት/ሀ፤ ለመኖሪያ ያለዎት ቁርጠኝነት ደረጃን የሚለኩ ጥያቄዎች**

እባክዎ ለመኖሪያ ያለዎትን ቁርጠኝነት ደረጃ የሚመለከተውን አንዱን አሜሪካ ከጥያቄው ቁጥር ፊት ለፊት እንደሚከተለው ከተሰጠት ቁጥሮች አንዱን በሚከተለው ይተባበሩን በፍጹም አልሰማም = 1 ፤ አልሰማም = 2፤ ገለልተኛ አቋም = 3፤ እስማህሁ = 4፤ በጣም እስማህሁ = 5

| ተ. ቁ | ማጣቀሻ   | በፍጹም አልሰማም | አልሰማም | ገለልተኛ | እስማህሁ | በጣም እስማህሁ |
|------|--|------------|-------|-------|-------|-----------|
| 1    | መኖሪያ ለማስደግ ከሚከበቅብኝ በላይ በፍላጎቴ እጥራለሁ                   | 1          | 2     | 3     | 4     | 5         |
| 2    | በመኖሪያ የምገለጸው ወይም መኖሪያ የሚሰጠኝ ጠንካራ ሰው ነኝ               | 1          | 2     | 3     | 4     | 5         |
| 3    | ከመኖሪያ ጋር የተያያዘ የትኛውም ስራ ሲሰጠኝ በመቀበል ከሚከበቅብኝ በላይ እሰራለሁ | 1          | 2     | 3     | 4     | 5         |
| 4    | ከሌላ የመኖሪያ ባንደረቦቼ ጋር ጥበቅ ቁርኝት እንዳለኝ ይሰማኛል             | 1          | 2     | 3     | 4     | 5         |
| 5    | በመኖሪያ የምገለጸው ሰው ነኝ (በያዝኩት መኖሪያ አባል ስለሆንኩ)            | 1          | 2     | 3     | 4     | 5         |
| 6    | ለስራ አፈፃፀሜ መኖሪያ እጅግ በጣም ያነሳሳኛል                        | 1          | 2     | 3     | 4     | 5         |
| 7    | ሁልጊዜ በዚህ መኖሪያ ለመከራ ምርጫ ስለሆነ እጅግ በጣም እኮራለሁ            | 1          | 2     | 3     | 4     | 5         |
| 8    | መኖሪያ የምጠቅም የማይቻል ሰው ነኝ                               | 1          | 2     | 3     | 4     | 5         |
| 9    | መኖሪያ ጠቃሚ እንደሆነ የምገነዘብ ሰው ነኝ                          | 1          | 2     | 3     | 4     | 5         |
| 10   | በዚህ መኖሪያ ውስጥ መሆኔን የምደብቅ ሰው ነኝ                        | 1          | 2     | 3     | 4     | 5         |

**ክፍል አራት/ለ፤ ለመሥሪያ ቤት ያለዎት ቁርጠኝነትን የሚለኩ ጥያቄዎች**

እባክዎ ለመከራ ለመሥሪያ ቤት ያለዎትን ቁርጠኝነት ደረጃ የሚመለከተውን አንዱን አሜሪካ ከጥያቄው ቁጥር ፊት ለፊት እንደሚከተለው ከተሰጠት ቁጥሮች አንዱን በሚከተለው ይተባበሩን በፍጹም አልሰማም = 1 ፤ አልሰማም = 2፤ ገለልተኛ አቋም = 3፤ እስማህሁ = 4፤ በጣም እስማህሁ = 5

| ተ. ቁ | ማጣቀሻ በይዘቱ                                    | በፍጹም አልሰማም | አልሰማም | ገለልተኛ | እስማህሁ | በጣም እስማህሁ |
|------|--|------------|-------|-------|-------|-----------|
|      | <b>1. ተቋማ ስለመደድ ቁርጠኝነት</b>                   |            |       |       |       |           |
| 1    | ቀሪ የስራ ጊዜዬን በዚህ ተቋም ውስጥ ባሳልፍ በጣም ደስተኛ ነኝ     | 1          | 2     | 3     | 4     | 5         |
| 2    | ከኔ ተቋም ውጭ ላሉ ሰዎች ስለ መከራ ለመሥሪያ ቤቱ በማወራት እዝናለሁ | 1          | 2     | 3     | 4     | 5         |
| 3    | መከራ ለመሥሪያ ቤቱ ችግር ሲገጥመው ልክ እንደራሴ ይሰማኛል        | 1          | 2     | 3     | 4     | 5         |
| 4    | እንደሚሻለኝ በዚህ ተቋም በቀላሉ እንደሌሎች በሌሎችም እንደዛው      | 1          | 2     | 3     | 4     | 5         |
| 5    | በመከራ ለመሥሪያ ቤቱ ውስጥ ስኖር ከቤተሰቦቼ ጋር እንዳለሁ ይሰማኛል  | 1          | 2     | 3     | 4     | 5         |

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 6                                      | ከመከራያ ቤቱ ጋር ያለኝ ቁርኝት ከጥሩ ስሜት የመነጨ እንደሆነ ይሰማኛል   | 1 | 2 | 3 | 4 | 5 |
| 7                                      | ይህ ተቋም ለኔ በጣም ጠላቅ ያለ ትርጉም አለው (እንደግል ይሰማኛል)   | 1 | 2 | 3 | 4 | 5 |
| 8                                      | በዚህ ተቋም ውስጥ ስለመሆኔ ጠላቅ ያለ ጥሩ ስሜት ይሰማኛል   | 1 | 2 | 3 | 4 | 5 |
| <b>2. በተቋሙ ስለመቆይት ቁርጠኝነት</b>           |   |   |   |   |   |   |
| 9                                      | ሌላ ስራ ሳላገኝ ያሁኑ ስራዬን ባቆም በሜ.ጠረው ነገር አልፈራም  | 1 | 2 | 3 | 4 | 5 |
| 10                                     | ምንም እንኳን መልቀቅ ብፈልግ፡ ለኔ አሁን መልቀቅ በጣም ከባድ ነው  | 1 | 2 | 3 | 4 | 5 |
| 11                                     | አሁን ከስራዬ ለመልቀቅ ብወስን እንኳ ሂወቴ በጣም ይመስታል   | 1 | 2 | 3 | 4 | 5 |
| 12                                     | አሁን ከስራዬ ለመልቀቅ ባስብ እጅግ በጣም ዋጋ ያስከፍላኛል   | 1 | 2 | 3 | 4 | 5 |
| 13                                     | ባሁን ሰዓት በመከራያ ቤቱ የመቆየት ፍላጎቴ መሰረታዊና አስፈላጊ ነው   | 1 | 2 | 3 | 4 | 5 |
| 14                                     | ይህን ተቋም እንዳለቀው ሌላ ምንም አሜሌም እንደሌለኝ ይሰማኛል   | 1 | 2 | 3 | 4 | 5 |
| 15                                     | ይህን ተቋም ብለኝ ከዋና አደጋዎች ውስጥ አንዱ ያሜራሽ እጥረት ነው  | 1 | 2 | 3 | 4 | 5 |
| 16                                     | በዚህ ተቋም እንደቀጥሎ ካደረጉኝ ዋና ምክንያቶች አንዱ መልቀቁ መሆኔኝ የሆነ መስዋዕትነት ስለማይቀረኝና ከሌሎች ተቋማት ማነሻው ስለማይበልጥ ነው | 1 | 2 | 3 | 4 | 5 |
| <b>3. በተቋሙ መቆይትን እንደወሰነ ግዴታ ስለመቁጠር</b> |   |   |   |   |   |   |
| 17                                     | ባሁን ጊዜ ሰዎች ካንዱ ወደሌላ ተቋም ባብዛኛው የሚዋወሩ አይመስለኝም   | 1 | 2 | 3 | 4 | 5 |
| 18                                     | እኔ እንደማማው ሰዎች ሀላጊዬም ለተቋማቸው ታማኝ መሆን እንዳለባቸው ነው   | 1 | 2 | 3 | 4 | 5 |
| 19                                     | ዝምብሎ ካንዱ ወደሌላው ተቋም መዘለል የስነ-ምግባር ጉድለት ይመስለኛል  | 1 | 2 | 3 | 4 | 5 |
| 20                                     | በዚህ ተቋም ውስጥ በስራዬ ላይ እንደቆይ ከሚደረጉኝ ነገሮች አንዱና ዋናው በታማኝነት ስለማምና ሞላላ ግዴታ ስለያዘኝ ነው                | 1 | 2 | 3 | 4 | 5 |
| 21                                     | ለእኔ ይህ ተቋም ካሉት ጠፍ ተቋማት ሁሉ የተሻለ የጠፍ ተቋም ነው   | 1 | 2 | 3 | 4 | 5 |
| 22                                     | ለተቋማችን ታማኝነትን ገንዘብ ማድረግ እንዳለብን አምናለሁ  | 1 | 2 | 3 | 4 | 5 |
| 23                                     | ነገሮች በሂደት የሚከተሉት አንድ ሰው በተቋሙ ስራ ላይ ሲቆይ ነው   | 1 | 2 | 3 | 4 | 5 |
| 24                                     | ይህ መከራያ ቤት ወጠታማ እንዲሆን ዘወትር ከሚከበቅብኝ ተግባር በተጨማሪ የበለጠ አስተዋፅኦ ለማጠናከር ፍቃደኛ ነኝ                    | 1 | 2 | 3 | 4 | 5 |

**ክፍል አምስት: ስለእርስዎ ግላዊ ባህሪን በተመለከተ የሚሉ ጥያቄዎች**

እባክዎ ስለእርስዎ ግላዊ ባህሪ የሚመለከተውን አንዱን አሜሌም ከጥያቄው ቁጥር ፊት ለፊት እንደሚከተለው ከተሰጠት ቁጥሮች አንዱን በሚከበብ ይተባበሩኝ

በፍጹም አልስማም = 1 ፤ አልስማም = 2 ፤ ገለልተኛ አቋም = 3 ፤ እስማህሁ = 4፤ በጣም እስማህሁ = 5

| ተ. ቁ | መጠይቆች   | በፍጹም አልስማም | አልስማም | ገለልተኛ | እስማህሁ | በጣም እስማህሁ |
|------|---|------------|-------|-------|-------|-----------|
| 1    | እንደኔ እምነት የትኛውንም አይነት ሰብ ነገሮች መጠቀም በመቻላቸው ላይ አሉታዊ ተፅዕኖ አለው                            | 1          | 2     | 3     | 4     | 5         |
| 2    | እኔ ሁልጊዜም ስራ ቦታ በስዓቱ እገኛለሁ   | 1          | 2     | 3     | 4     | 5         |
| 3    | በሞትና በሂወት ስራ ላይ መጋለጥ/መጠጫ ጭቀትን ከመፍጠሩም በላይ አልፎ የሰራ አፈፃፀም ጎድቶታል                          | 1          | 2     | 3     | 4     | 5         |
| 4    | የሰራ ጫዳ ከሌሎች ብላይ በሆነው እንኳ ለመቼ ቆራጥ/ታማኝ አድርጎኛል   | 1          | 2     | 3     | 4     | 5         |
| 5    | ለምትወልድ እናት የህክምና አገልግሎት ለመስጠት የክህሎት ችግር አይገጥመኝም                                       | 1          | 2     | 3     | 4     | 5         |
| 6    | እሷ ሂደት ስትሰጥ ሞት ስለማይገባትና የእናቶችን ሞት መኮነስ ስላለብኝ፤ መቼም በፈቀደ መጠን አገልግሎት ለመስጠት መላ ተነሳሽነት አለኝ | 1          | 2     | 3     | 4     | 5         |
| 7    | በመቼም ምላሽ-ሰጭ/ደንበኛ ተኮር እንደሆንኩ ይሰማኛል   | 1          | 2     | 3     | 4     | 5         |
| 8    | አገልግሎት ስለጥ ወጠቱ ሂደቱን ስለሚልፀወ፤ ወጠቱ ላይ እንደማትኮር አምናለሁ (በወጠቱ ተኮር አምናለሁ)                     | 1          | 2     | 3     | 4     | 5         |
| 9    | ምንም እንኳ ችግር በገጥመኝ ከስራዬ አልቀርም  | 1          | 2     | 3     | 4     | 5         |
| 10   | ለስራዬ ሀላፊነትና ተጠያቂነትን እንደማሸከም እኔና ጉዋደኞቼ ስለእኔ ይሰማኛል                                      | 1          | 2     | 3     | 4     | 5         |

**ክፍል ስድስት: በጠፍ ተቋም ስለሚጠው የወላድ አገልግሎትና የተቋማ አላማ በተመለከተ የሚከተሉ ጥያቄዎች**

እባክዎ ስለወላድ አገልግሎትና የተቋማ አላማ የሚመለከተውን አንዱን አሜሌ ከጥያቄው ቁጥር ፊት ለፊት እንደሚከተለው ከተሰጠቱ ቁጥሮች አንዱን በመጠቀም ይተባበሩኝ

በፍጹም አልስማም = 1 ፤ አልስማም = 2 ፤ ገለልተኛ አቋም = 3 ፤ እስማህሁ = 4፤ በጣም እስማህሁ = 5

| ተ. ቁ | መጠይቆች  | በፍጹም አልስማም | አልስማም | ገለልተኛ | እስማህሁ | በጣም እስማህሁ |
|------|--|------------|-------|-------|-------|-----------|
| 1    | እንደሚከተለኝ: በሀገር ደረጃ የናቶችን ሞት ለመኮነስ የተያዘው አላማ በጣም የተጋነነ ስለሆነ ለማሳካት ይከብዳል                 | 1          | 2     | 3     | 4     | 5         |
| 2    | እኔ ባለሀብት ተቋም በወላድ አገልግሎት አሰጣጥ ላይ የታቀደው ግብ የሚከካ: የሚከካና እወን ለሆነ የሚቻል ነው                  | 1          | 2     | 3     | 4     | 5         |
| 3    | በተቋሜ ባጠቃላይ በጠፍ ዘርፍ የምንገኝ ባለሙያዎች የወላድ አገልግሎትን በመጠጫ የእናቶችን ሞትና ህመም ለመኮነስ የጋራ ሪዕይ አለን     | 1          | 2     | 3     | 4     | 5         |
| 4    | ለስራ አፈፃፀሜ ምክንያታዊ: ወቅታዊና ጊዜወን የጠበቀ ምላሽ እገኛለሁ  | 1          | 2     | 3     | 4     | 5         |
| 5    | እንደኔ እምነት: “ቤት ወስጥ ከመላድ ነፃ የሆነ ቀበሌ” የሚለው መጽሐፍ በጠፍ ተቋም የሚጠራው የወላድ አገልግሎት ተጠቃሚ ቁጥር ይጨምራል | 1          | 2     | 3     | 4     | 5         |
| 6    | በእኔ ተቋም የወላድ አገልግሎት ሰጪዎች የቡድን ስራ ጥላቻ ነው  | 1          | 2     | 3     | 4     | 5         |
| 7    | እንደሚከተለኝ በተቋሜ ደረጃ ያሉ ደንብና መመሪያዎች ከመቻላቸው ስንት ግብር አንፃር ሲታዩ አይከበሩም                        | 1          | 2     | 3     | 4     | 5         |
| 8    | እንደሚከተለኝ: በግደለሽነት የወላድ አገልግሎት የሚጠጡ ባለሙያዎች በህግ ሊቀጠፍ ከመቻላቸው ለሰረዙ ይገባል                    | 1          | 2     | 3     | 4     | 5         |

**Annex IV: Item loadings of the tools used in this study**

1. Factor loadings of the items used to measure the professional commitment of health professionals, Jimma Zone, southwest Ethiopia, 2016(n=412)

| Items to measure Professional commitment  | Professional commitment         |
|---|---------------------------------|
|   | Single factor-loading (Eigen>1) |
| PC3-I would accept almost any type of job that related to my profession to keep working beyond expected from me | 0.845                           |
| PC10-I am a person who tries to hide belonging to my profession (R)   | 0.807                           |
| PC5-I am a person who is proud to belong to my profession   | 0.803                           |
| PC9-I am a person who considers my profession to be important   | 0.782                           |
| PC4-I am a person who feels strong ties with other members of my profession                                     | 0.782                           |
| PC8-I am a person who criticizes my profession (R)  | 0.778                           |
| PC6-My profession really inspires the very best in me in the way of job performance.                            | 0.774                           |
| PC7-I am extremely glad that I chose this profession to work for ever in advance                                | 0.770                           |
| PC2-I am a person who identifies strongly with my profession  | 0.752                           |
| PC1-I am willing to put in a great deal of effort to develop my profession beyond expected                      | 0.725                           |

**Communalities**

| Items measuring PC with five point-Likert scale   | Initial | Extraction |
|---|---------|------------|
| PC1-I am willing to put in a great deal of effort to develop my profession beyond expected                      | 1.000   | .525       |
| PC2-I am a person who identifies strongly with my profession  | 1.000   | .565       |
| PC3-I would accept almost any type of job that related to my profession to keep working beyond expected from me | 1.000   | .714       |
| PC4-I am a person who feels strong ties with other members of my profession                                     | 1.000   | .612       |
| PC5-I am a person who is proud to belong to my profession   | 1.000   | .645       |
| PC6-My profession really inspires the very best in me in the way of job performance.                            | 1.000   | .600       |
| PC7-I am extremely glad that I chose this profession to work for ever in advance                                | 1.000   | .593       |
| PC8-I am a person who criticizes my profession (R)  | 1.000   | .606       |
| PC9-I am a person who considers my profession to be important   | 1.000   | .612       |
| PC10-I am a person who tries to hide belonging to my profession (R)   | 1.000   | .652       |

2. Factor loadings of the items used to measure job satisfaction of health professionals, Jimma Zone, southwest Ethiopia, 2016(n=412)

**Rotated Component Matrix<sup>a</sup>**

| Retained items during factor analysis   | 1- Perceived working environment | 2- Perceived remuneration and promotion opportunity | 3- Perceived autonomy at work | 4- Perceived professional in/off service training | 5- Perceived staff interaction |
|---|----------------------------------|---|-------------------------------|---|--------------------------------|
| SI23-The physical conditions in which you work and supplies to your job                                       | .787                             |   |                               |   |                                |
| SI20-Management involve staff in decision making  | .735                             |   |                               |   |                                |
| SI22-Sufficient time you have for each clients  | .721                             |   |                               |   |                                |
| SI21-Working environment encourage you to make adjustment in your professional practice to suit patient needs | .682                             |   |                               |   |                                |
| SI19-Atmosphere of co-operation between staff & management  | .652                             |   |                               |   |                                |
| SP5-Sufficient opportunity you have for professional growth   |                                  | .758  |                               |   |                                |
| SR3-With your job advantages rather than disadvantage   |                                  | .738  |                               |   |                                |
| SR1-With your income as a reflection of the work you do   |                                  | .704  |                               |   |                                |
| SR2-Compensation you get for working weekends   |                                  | .669  |                               |   |                                |
| SP4-Existence of enough support for continuing education  |                                  | .663  |                               |   |                                |
| SA13-Freedom to chose and decide your own working methods   |                                  |   | .805                          |   |                                |
| SA15-The freedom you have to work alone on the job  |                                  |   | .790                          |   |                                |
| SA14-Support given to be fully accountable for your decisions   |                                  |   | .775                          |   |                                |
| SL7-Adequate Consideration given to your opinion and suggestion for change in the work setting                |                                  |   | .507                          |   |                                |
| ST10-With the training opportunities available to you   |                                  |   |                               | .844  |                                |
| ST11-Training programs appropriate to enhance your professional job performance                               |                                  |   |                               | .835  |                                |
| ST12-Your organization gives training and orientation for new staffs well                                     |                                  |   |                               | .585  |                                |
| SI16-Good working relationship you have with your colleagues  |                                  |   |                               |   | .847                           |
| SI18-By your dependency on your colleagues for support  |                                  |   |                               |   | .818                           |
| SI17-Existence of clear channel of communication at your workplace  |                                  |   |                               |   | .722                           |

3. Factor loadings of the items used to measure the perceived organizational support of health professionals, Jimma Zone, southwest Ethiopia, 2016(n=412)

**Rotated Component Matrix<sup>a</sup>**

| Retained Items after removing cross-loaded with two round analysis                    | 1- Perceived HR policy & practice | 2- Perceived facility location | 3- Perceived work-life balance | 4- Perceived concern for employee | 5- Perceived org. work-load | 6- Perceived value and care for employee |
|---|-----------------------------------|--------------------------------|--------------------------------|-----------------------------------|-----------------------------|--|
| OH20-The transfer policy is consistent and fair                                       | .830                              |                                |                                |                                   |                             |  |
| OH19-There is a transfer policy that guarantee easy transfer to other facility        | .802                              |                                |                                |                                   |                             |  |
| OH21-There is clear policies and procedures on how to evaluate employees' performance | .773                              |                                |                                |                                   |                             |  |
| OH18-There is a consistent /unbiased application of promotion policy                  | .617                              |                                |                                |                                   |                             |  |
| OH22-There is clear training and development policy                                   | .567                              |                                |                                |                                   |                             |  |
| OL27-The location of facility gives me an opportunity to generate additional income   |                                   | .786                           |                                |                                   |                             |  |
| OL30-There is sufficient infrastructure in the place where the facility is located    |                                   | .759                           |                                |                                   |                             |  |
| OL29-The weather condition where the facility located is conducive for living         |                                   | .756                           |                                |                                   |                             |  |
| OL28-The cost of life where the facility is located is fair                           |                                   | .730                           |                                |                                   |                             |  |
| OW10-I have reasonable leisure time   |                                   |                                | .791                           |                                   |                             |  |
| OW9-I have sufficient time to undertake both my job and family related issues         |                                   |                                | .776                           |                                   |                             |  |
| OW11-The facility provides good health care service to my family                      |                                   |                                | .695                           |                                   |                             |  |
| OC7-The organization shows very little concern for me (R)                             |                                   |                                |                                | .861                              |                             |  |
| OC5-Even if I did the best job possible, the organization would fail to notice (R)    |                                   |                                |                                | .851                              |                             |  |
| OV3-The organization would ignore any complaint from me(R)                            |                                   |                                |                                | .721                              |                             |  |
| OW15-My work load don't affect my personal life                                       |                                   |                                |                                |                                   | .834                        |  |
| OW16-My job permits me to undertake my social obligations                             |                                   |                                |                                |                                   | .721                        |  |
| OW13-I work under less stressful situation  |                                   |                                |                                |                                   | .625                        |  |
| OV4-The organization really cares about my well-being                                 |                                   |                                |                                |                                   |                             | .786                                     |
| OV1-The organization values my contribution to its well-being                         |                                   |                                |                                |                                   |                             | .749                                     |
| OV2-The organization fails to appreciate any extra effort from me(R)                  |                                   |                                |                                |                                   |                             | -.513                                    |

4. Factor loadings of the items used to measure organizational commitment of health professionals, Jimma Zone, southwest Ethiopia, 2016(n=412)

**Rotated Component Matrix<sup>a</sup>**

| Retained items after removing cross-loaded items, twice in factor analysis  | Continuance<br>commitment | 2- Affective<br>commitment | 3- Normative<br>commitment |
|---|---------------------------|----------------------------|----------------------------|
| OCC12-It would be too costly for me to leave my organization now  | .800                      |                            |                            |
| OCC15-One of the few serious consequences of leaving this organization would be the scarcity of available alternatives  | .799                      |                            |                            |
| OCC11-Too much in my life would be disrupted if I decided to leave my organization now  | .790                      |                            |                            |
| OCC16-One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice—another organization may not match the overall benefits I have here | .746                      |                            |                            |
| OCC14-I feel that I have very few options to consider leaving this organization   | .721                      |                            |                            |
| OCC13-Right now, staying with my organization is a matter of necessity as much as desire  | .718                      |                            |                            |
| OCN17-I don't think that people these days move from facility to facility too often   | .667                      |                            |                            |
| OCC10-It would be very hard for me to leave my organization right now, even if I wanted   | .663                      |                            |                            |
| OCA5-I feel like 'part of the family' at my organization  |                           | .760                       |                            |
| OCA7-This organization has a great deal of personal meaning for me  |                           | .737                       |                            |
| OCA8-I feel a 'strong' sense of belonging to my organization  |                           | .691                       |                            |
| OCA1-I would be very happy to spend the rest of my career with this organization  |                           | .691                       |                            |
| OCA2-I enjoy discussing about my organization with people outside it  |                           | .690                       |                            |
| OCA6-I feel 'emotionally attached' to this organization   |                           | .683                       |                            |
| OCA4-I think that I could easily become attached to another organization as I am to this one(R)   |                           | -.652                      |                            |
| OCA3-I really feel as if this organization's problems are my own  |                           | .610                       |                            |
| OCN18-I believe that a person must always be loyal to his or her organization   |                           |                            | .765                       |
| OCN24-I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful  |                           |                            | .752                       |
| OCN22-I was taught to believe in the value of remaining loyal to one organization   |                           |                            | .740                       |
| OCN20-One of the major reasons I continue to work in this organization is that I believe loyalty is important and therefore feel a sense of moral obligation to remain                                    |                           |                            | .660                       |



5. Factor loadings of the items used to measure Personal characteristics of health professionals, Jimma Zone, southwest Ethiopia, 2016(n=412)

**Component Matrix<sup>a</sup>**

| Retained items after removal due to cross loading at the first step of extraction                       | Personal characteristics |
|---|--------------------------|
| Pr8-I believe that the end (outcome) justifies the means in providing services ,I am outcome-oriented   | .831                     |
| Pr7-I feel as I am responsive/client-centered in my profession  | .818                     |
| Pr2-I am always on time for work  | .789                     |
| Pr10-I and my co-workers feel about me as I am being responsible and accountable for my action          | .788                     |
| Pr1-I believe that using any type of addictive substance has negative effect on one's professional role | .785                     |
| Pr4-My work load is beyond what others had that made me more committed to my profession                 | .784                     |
| Pr3-The exposure to life and death situation makes me stressed that affect my performance               | .715                     |

**Communalities**

| Items   | Extraction |      |
|---|------------|------|
|   | Initial    | n    |
| Pr1-I believe that using any type of addictive substance has negative effect on one's professional role | 1.000      | .616 |
| Pr2-I am always on time for work  | 1.000      | .623 |
| Pr3-The exposure to life and death situation makes me stressed that affect my performance               | 1.000      | .511 |
| Pr4-My work load is beyond what others had that made me more committed to my profession                 | 1.000      | .614 |
| Pr7-I feel as I am responsive/client-centered in my profession  | 1.000      | .669 |
| Pr8-I believe that the end (outcome) justifies the means in providing services ,I am outcome-oriented   | 1.000      | .691 |
| Pr10-I and my co-workers feel about me as I am being responsible and accountable for my action          | 1.000      | .620 |

6. Factor loadings of the items used to measure perception on IDS uptake of health professionals, Jimma Zone, southwest Ethiopia, 2016(n=412)

**Rotated Component Matrix<sup>a</sup>**

| Retained items from factor analysis  | 1- Perceived maternal health goal | 2- Institutional delivery service provision |
|--|-----------------------------------|---|
| IDS3-At my facility as well as in health sector we had shared vision towards delivery service provision to be increased so as to reduce maternal morbidity & mortality | .866                              |   |
| IDS2-At my facility level, the planed objective on institutional delivery service is achievable, measurable and realizable   | .854                              |   |
| IDS5-I believe ‘home delivery free kebeles’ motto may increase uptake of institutional delivery services   | .849                              |   |
| IDS1-I think at national level, the maternal health goal is over ambitious so it is difficult to achieve(R)  | .770                              |   |
| IDS7-I feel the facility level rules and regulations are not respected in line with professionals? ethics (R)  |                                   | .851  |
| IDS8-I think those professionals? who are negligent in delivery service provision should be punished and dismissed from that profession legally                        |                                   | .844  |
| IDS6-At my health facility, delivery service providers' case team approach is well organized   |                                   | .838  |
| IDS4-There is periodic, reasonable feedback to my performance  |                                   | .795  |

Annex-V; Frequency distribution of five point Likert scale response of participants for professional commitment measuring items, Jimma zone,2016(n=412)

| No  | Items measuring PC  | Strongly disagree | Disagree   | Neutral   | Agree      | Strongly agree |
|-----|---|-------------------|------------|-----------|------------|----------------|
| 1.  | I am willing to put in a great deal of effort to develop my profession beyond expected                      | 39(9.5%)          | 38(9.2%)   | 33(8%)    | 181(43.9%) | 121(29.4%)     |
| 2.  | I am a person who identifies strongly with my profession  | 20(4.9%)          | 35(8.5%)   | 30(7.3%)  | 206(50%)   | 121(29.4%)     |
| 3.  | I would accept almost any type of job that related to my profession to keep working beyond expected from me | 22(5.3%)          | 39(9.5%)   | 33(8%)    | 197(47.8%) | 121(29.4%)     |
| 4.  | I am a person who feels strong ties with other members of my profession                                     | 12(2.9%)          | 43(10.4%)  | 43(10.4%) | 199(48.3%) | 115(27.9%)     |
| 5.  | I am a person who is proud to belong to my profession   | 18(4.4%)          | 46(11.2%)  | 29(7%)    | 173(42%)   | 146(35.4%)     |
| 6.  | My profession really inspires the very best in me in the way of job performance                             | 19(4.6%)          | 50(12.1%)  | 29(7%)    | 177(43%)   | 137(33.3%)     |
| 7.  | I am extremely glad that I chose this profession to work for ever in advance                                | 32(7.8%)          | 56(13.6%)  | 29(7.0%)  | 154(37.4%) | 141(34.2%)     |
| 8.  | I am a person who criticizes my profession (R)  | 166(40.3%)        | 165(40%)   | 39(9.5%)  | 24(5.8%)   | 18(4.4%)       |
| 9.  | I am a person who considers my profession to be important   | 27(6.6%)          | 31(7.5%)   | 25(6.1%)  | 168(40.8%) | 161(39.1%)     |
| 10. | I am a person who tries to hide belonging to my profession (R)  | 157(38.1%)        | 184(44.7%) | 31(7.5%)  | 23(5.6%)   | 17(4.1%)       |

R=reversely coded negatively stated items

**AnnexVI: List of selected Woredas and town administration with respective HCs that included in this study**

**Name of selected Woredas'/town and respective health centers**

- |                        |                       |                      |
|------------------------|-----------------------|----------------------|
| 1. Agaro woreda        | 1) Seka HC            | 2) Ambuye HC         |
| 1) Agaro HC            | 2) Wokito Medal HC    | 3) Babu HC           |
| 2) Walda HC            | 3) Kake Gudo HC       | 4) Chime HC          |
| 2. Jimma town          | 4) Sentema HC         | 5) Gale Jimate HC    |
| 1) Jimma HC            | 5) Buyo Kechemma HC   | 6) Harawa Jimate HC  |
| 2) Higher two HC       | 6) Deto Kerso HC      | 7) Wabe Koticha HC   |
| 3) Bochobore HC        | 7) Lilu Omoti HC      | 7. Tiro Afeta Woreda |
| 4) Mendera Koch HC     | 8) Daboyaya HC        | 1) Dimtu HC          |
| 3. Kersa Woreda        | 9) Geta Shewa HC      | 2) Akko HC           |
| 1) Serbo HC            | 5. Shebe sombo Woreda | 3) Chora Anchabi HC  |
| 2) Bulbul HC           | 1) Shebe HC           | 4) Raga Siba HC      |
| 3) Bala Wajo HC        | 2) Sombo HC           | 5) Busa HC           |
| 4) Kusaye Beru HC      | 3) Kishe HC           | 6) Raga HC           |
| 5) Adare Gora HC       | 4) Mechi HC           | 8. Gumay Woreda      |
| 6) Kara Gora HC        | 5) Anja Gambo HC      | 1) Toba HC           |
| 7) Kalacha HC          | 6. Limu Kossa Woreda  | 2) Gatto kure HC     |
| 4. Seka chokorsa Wored | 1) Limu Genet HC      | 3) Barachini HC      |

Fig 5-Map of Jimma Zone (study area) and selected wordedas for the study

## *Map Of Jimma Zone*

