

Original Article

Health Professionals' Intention to leave their Job from Public Health Facilities and Associated Factors in Ethiopia: A Systematic Review and Meta-analysis.

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Abstract

Background: Intention to leave describes an employee's intention or plan to leave their current job and seek alternative employment opportunities. This intention serves as an early indicator of potential turnover behavior. Notably, no comprehensive national data in the country reveals the extent and underlying factors associated with this phenomenon.

Objective: To examine health professionals' intention to leave their jobs in public health facilities and its determinants in Ethiopia.

Methods: Studies were searched for using databases such as PubMed, CINHAL, Science Direct, and HINARI, while Google Scholar was utilized for accessing gray literature. This review covers both published and unpublished studies containing quantitative data written in English, focusing on the intention of health professionals to leave their jobs in Ethiopia. All necessary data were extracted by two independent authors and imported into STATA version 14.0 for analysis. Heterogeneity was checked by using a χ^2 and I^2 tests. Publication bias was examined by performing Egger's correlation and Begg's regression intercept tests. A meta-analysis was conducted using a random-effects model.

Results: We used a total of 25 primary studies in our review. The pooled overall health professionals' intention to leave their job was 59.05% (95% CI: 54.35, 63.74%) with a range from 39%–83.7%. Sex (AOR: 1.69, 95%CI: 1.31–2.18), job or work environment (AOR: 3.59, 95% CI: 2.05–6.29), payment or any benefit (AOR: 7.37, 95%CI: 2.89–18.79), supervision and evaluation (AOR: 2.99, 95% CI: 2.27–3.93), appraisal and recognition (AOR: 3.4, 95% CI: 2.62–4.41) and organizational commitment (AOR: 1.9, 95%CI: 1.04–3.48) were the significant factors.

Conclusion and recommendation: The results reveal a significant intention among health professionals to leave their jobs in Ethiopia. To counter this trend, it is advised to cultivate a positive workplace environment, implement effective monitoring and evaluation systems, and offer ample career development opportunities.

Keywords: Health professional; intention to leave; systematic review; Ethiopia

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Introduction

Inadequate human resources are a major barrier to improving global health, and the health sector is characterized by a high turnover combined with internal as well as external factors (1). The concept of "intention to leave" differs from "turnover." Intention to leave refers to individuals' perceptions towards leaving, whereas turnover is the act of individuals leaving an organization. Intention to leave is an immediate predictor of turnover behavior because it is an intervening variable between job satisfaction and actual turnover (2).

Approximately 1.3 percent of the world's health personnel attend to individuals living with 25 percent of the

world's disease burden (3). There should be an optimum number and professional mix of human resources for the effective coverage and quality of the intended services (3). Many people in developing countries are infected with HIV/AIDS, and the attrition of health workers adds to the burden (4). As a result, the health system's ability to maintain proper coverage, access, and utilization of services is affected by the loss of health professionals from public health institutions (5).

Ethiopia's health system has struggled with several human resource issues, the most serious of which is an overall lack of employees in essential sectors, which is

exacerbated by many skilled personnel leaving public health facilities. Furthermore, those who have stayed are spread inequitably across urban and rural areas. As a result, the country's health outcomes and health service indices remained among the worst in the world (6). To achieve the goal of improving public health, it's crucial to establish, deploy, and maintain a skilled and motivated health workforce. Shortages of health workers not only threaten the viability of healthcare facilities but also compromise the quality of local healthcare services and intervention coverage. When health professionals leave, it negatively impacts organizational performance as they are key assets necessary for delivering effective healthcare interventions (1, 7, 8).

The magnitude of health professionals' intention to leave their job is different across countries and specific fields of specialization, but it is higher in low-income countries (1, 9-12). For example, a review in sub-Saharan African countries revealed that the pooled proportion of nurses' intention to leave their job was 50.74% (11). In 2013, the overall intention of health workers in Tanzania, Malawi, and South Africa to leave their jobs was 18.8%, 26.5%, and 41.4%, respectively (10). In Senegal, the intention to quit among midwives was 58.9% within a year (9). In Ethiopia, the overall intention of health workers to leave Jimma health facilities was 20% and 63.7% in 2013 and 2016, respectively (1), and 59.1% in the Gambella region, Ethiopia (13). In addition, approximately 48 percent of anesthesiologists planned to leave their jobs in Ethiopia, in 2014 (14).

Health professionals' intention to leave (ITL) their job is a drawback worldwide, particularly in developing countries, notably in Africa, and this problem usually results in the loss of competent and qualified nurses (15). In low- and middle-income countries (LMICs), a shortage of anesthesia providers contributes to a crisis in surgical access (16). Overall, health professionals' turnover is the most pressing problem facing the health systems of developing countries (17). The health system's ability to maintain proper coverage, access, and utilization of services is harmed by the loss of health professionals from public health institutions (18).

Individual and organizational factors such as job dissatisfaction, poor management, a lack of organizational support, low salaries and fringe benefits, a lack of involvement in decision-making, poor management, poor benefits, a lack of job security, and poor recognition can all influence the intention of health professionals to leave public health facilities (1, 11, 14, 17, 19-39).

The intention of health personnel to leave their jobs significantly impacts healthcare system performance, with healthcare institutions facing a shortage of

trained workers. In Ethiopia, studies aim to assess this intention and its factors, yet disparities across professions hinder a clear understanding nationwide. Despite efforts to reduce turnover, high rates persist. There's a pressing need for comprehensive research nationwide to understand these intentions and factors within the local context.

This study aims to fill these gaps by examining health workers' intentions and associated factors across Ethiopia. The findings will inform strategies to mitigate gaps in public health facilities. Thus, this review seeks to determine different health professionals' intentions to leave their jobs and their determinants in Ethiopia.

2. Methods and materials

2.1. Searching strategy

The systematic review and meta-analysis have been carried out in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline (40). We have reviewed published and unpublished data related to the health professionals' intention to leave their job and its determinants in Ethiopia until September 30, 2022. Relevant studies were identified through PubMed, CINAHL, ScienceDirect, HINARI, and Google Scholar.

To find the studies, we did search for (health professional OR health extension worker OR midwife OR nurse OR health officer OR laboratory OR pharmacy OR environmental health OR medical doctor OR anesthetist) AND (intention) AND (leave) AND (job OR work) AND (determinant* OR factor* OR cause* OR reason*) AND Ethiopia.

2.2. Selection of studies

The titles and abstracts of retrieved studies have been reviewed for relevance, and the full-text versions of potentially relevant articles were then analyzed according to the inclusion criteria detailed below. We looked for additional references in the reference lists of all included studies. The studies were looked up by two authors independently to prevent selection bias. All references were imported into a digital database (endnote).

2.3. Inclusion and Exclusion Criteria

This review included English-language literature, cross-sectional, and case-control studies with original quantitative data and sample sizes of more than 50 participants that have been published or unpublished, as well as articles about health professionals' intention to leave their job and its determinants in Ethiopia. Qualitative studies were excluded from the study.

2.4. Operational definitions

Health professional: In this study, it includes a health extension worker, midwife, nurse, health officer, laboratory technician and technologist, environmental

health professional, medical doctor, pharmacy technician and technologist, and anesthetist (1).

Intention to leave: The extent to which the health workers desire to leave the public health centers (2, 41).

Supervision and Evaluation: Supervision involves guiding and overseeing employees' tasks, while evaluation assesses performance against set standards.

Appraisal and recognition: Appraisal involves assessing employees' performance, while recognition entails acknowledging and rewarding their achievements.

2.5. Outcome measurement

The study has two main objectives: The first is to determine the pooled health professionals' intention to leave their job in Ethiopia. It was calculated by dividing the total number of health professionals who intend to leave by the total sample size (number of health professionals included in the study) and multiplying by one hundred (100). The second objective is to estimate the pooled effects of each factor on health professionals' intention to leave their job, and the odds ratios were calculated from the primary studies using Excel and Stata software.

2.6. Data extraction

Using a standardized data extraction format created in Microsoft Excel, two independent authors extracted all the required information. For the magnitude of health professional intention to leave, the data extraction format includes the author, publication year, study design, region of the country, sample size, screening tool used, response rate, and the magnitude of health professional intention to leave their job. For associated factors, the data extraction format was prepared in the form of a two-by-two table for each significant variable. Any disagreements between the authors were solved through discussion and double extraction of the inconsistent data.

2.7. Quality Assessment

The quality of the studies incorporated in the review and meta-analysis was evaluated using an adaptation of the Newcastle-Ottawa Scale for observational studies (42). Two authors independently have evaluated the quality of the original articles using the assessment tool as a guideline. The tool includes indicators that are divided into three main sections: the first section, which has five components and evaluates each study's methodological quality; the second section, which looks at how comparable the studies are; and the third section, which rates the original articles' statistical analysis quality. In the end, analyses have been included for articles of high and medium quality. The mean score of the outcomes of the assessments was used to resolve disagreements between assessors.

2.8. Data-analysis

Microsoft Excel was used to extract important information, which was then imported into STATA version 14.0 for analysis. The characteristics of original articles were described using texts, tables, and forest plots. The standard error of magnitude for each original article was calculated using the binomial distribution formula. Using χ^2 test and I2 test, the reported magnitude of studies' heterogeneity was examined. Publication bias was examined by performing Egger's correlation and Begg's regression intercept tests at a 5% significant level. In addition, subgroup analysis was conducted based on the types of profession and region of studies and publication year to minimize the random variations between the point estimates of the primary studies.

3. Results

3.1. Results of the Literature Search

In the first step of our search, we retrieved 2526 studies concerning health professionals' intention to leave their job through Google Scholar, PubMed, CINAHAL, ScienceDirect, HINARI, and other gray literature. Out of this scan, 2471 retrieved studies were omitted via a step-by-step procedure as irrelevant to the title, abstract, or outside of Ethiopia. Twenty-one other articles were also deleted because they were duplicates. Hence, we read the full texts of 54 articles and assessed their eligibility based on the predetermined criteria. About 29 additional studies were excluded because the outcome of interest was not reported, they involved a different population or study setting, or they were conducted in other countries. Finally, 25 studies were found to be eligible and included in the systematic review and meta-analysis (Figure 1).

3.2. Study Characteristics

Data for the twenty-five eligible studies were extracted and analyzed in this study. To determine the pooled estimated proportion of health professionals intending to leave their job by using 8852 professionals. The prevalence of health professionals' intent to leave their job in Ethiopia ranged from 39% in four regions (43) to 83.7% in the Southern Nations Nationalities People Republic (SNNPR) (44). Of the 25 studies included in this review, all of them were conducted using a cross-sectional study design and used quantitative data. Among these, six studies were found in Oromia (1, 45-49), one in Gambela (31), two in SNNPR (44, 50), eight in Amhara (11, 36, 51-56), one in Tigray (57), one in the Afar, Somali, Gambela, and Benishangul Gumz regions (43), two in Addis Ababa (58, 59), and four studies were conducted nationwide (14, 35, 60, 61). Regarding study settings, one study was conducted in a health center (1), nine in hospitals (14, 36, 44, 47, 51-53, 57, 59), twelve in both health centers and hospitals (11, 31, 43, 45, 46, 49, 50, 54, 55, 58, 61, 62) and three in health posts (48, 56, 60). In addition, concerning

study participants, ten studies included all types of health professionals (1, 31, 36, 44-46, 49, 51, 54, 58), one anesthesiologist (14), three health extension workers (48, 56, 60), eight nurses (11, 35, 47, 50, 53, 55, 57, 59, 62), one each for midwives (43), laboratories (52), and general practitioners (61) (Table 2).

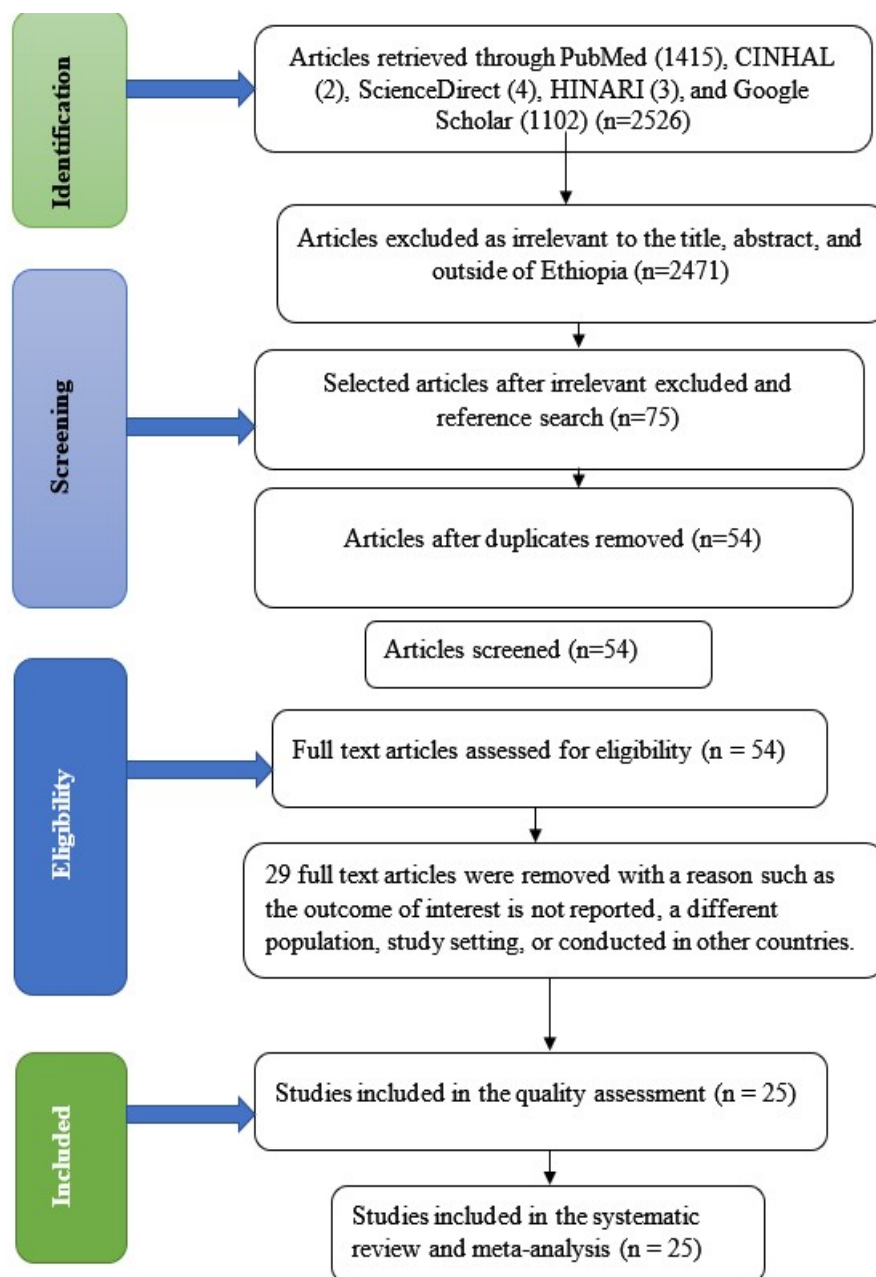


Figure 1: PRISMA statement presentation of systematic review and meta-analysis of health professionals' intention to leave their job from public health facilities in Ethiopia.

3.3. Meta-analysis

3.3.1. Prevalence of health professionals' intention to leave their job

In the current study, the pooled overall health professionals' intention to leave their job was 59.05% (95% CI; 54.35, 63.74%) with a range from 39% (43) to

83.7% (44) (Table 1). A random effect model was used, and severe heterogeneity was observed across the studies (I-squared = 95.1%, $p = 0.000$) (Figure 2).

Table 1: Summary table on the level of health professionals' intention to leave their job at public health facilities in Ethiopia.

| Region/city of study | Author | Publication year | Quality assessment score | Total sample | Response rate | Prevalence (95% CI) |
|----------------------|-----------------------|------------------|--------------------------|--------------|---------------|---------------------|
| Oromia | Kalifa et al (1) | 2016 | 8 | 505 | 90.1 | 63.7(59.28-68.12) |
| Nationwide | Kols et al (14) | 2018 | 7 | 251 | 100 | 47.8(41.62-53.98) |
| Gambela | Woldegiorgis (31) | 2015 | 8 | 256 | 98.4 | 48.4(42.23-54.57) |
| SNNPR | Nenko et al (44) | 2014 | 7 | 297 | 90.9 | 83.7(79.29-88.11) |
| Oromia | Gesesew et al (46) | 2016 | 8 | 422 | 87 | 59.4(54.38-64.42) |
| Amhara | Hussien et al (56) | 2020 | 8 | 383 | 95.8 | 64.1(59.19-69.01) |
| SNNPR | Asegid et al (50) | 2014 | 8 | 278 | 87 | 50.0(43.7-56.30) |
| Amhara | Ferede et al (54) | 2018 | 8 | 612 | 92.8 | 61.3(57.29-65.31) |
| Amhara | Worku et al (36) | 2019 | 8 | 408 | 93.6 | 67.8(63.11-72.49) |
| Amhara | Abera et al (51) | 2014 | 7 | 422 | 93.3 | 52.5(47.57-57.43) |
| Oromia | Teka et al (49) | 2018 | 7 | 305 | 100 | 77.7(73.03-82.37) |
| Amhara | Getie et al (55) | 2013 | 8 | 423 | 87.84 | 59.4(54.41-64.39) |
| Nationwide | Ayalew et al (35) | 2016 | 7 | 500 | 85 | 50.2(45.44-54.96) |
| Tigray | G/egziabher et al(57) | 2020 | 8 | 148 | 100 | 64.9(57.21-72.59) |
| Amhara | Engeda et al (53) | 2014 | 8 | 423 | 91.9 | 60.2(55.34-65.06) |
| Oromia | Debela et al (45) | 2017 | 7 | 362 | 100 | 65.0(60.09-69.91) |
| Oromia | Gizaw et al (47) | 2018 | 8 | 341 | 92.96 | 42.25(36.8-47.69) |
| Oromia | Kitila et al (48) | 2021 | 8 | 245 | 100 | 52.0(45.74-58.26) |
| Four regions* | Muluneh et al (43) | 2021 | 7 | 107 | 100 | 39.0(29.76-48.24) |
| Amhara | Ayalew & workneh(62) | 2017 | 7 | 210 | 90.95 | 64.6(57.82-71.38) |
| Addis Ababa | Wubetie et al (59) | 2020 | 8 | 207 | 91.1 | 77.5(69.4-85.6) |
| Nationwide | Tekle et al (60) | 2022 | 8 | 584 | 100 | 39.5(35.54-43.47) |
| Amhara | Dellie et al. (52) | 2019 | 7 | 366 | 91.8 | 65.5(60.42-70.58) |
| Addis Ababa | Girma et al (58) | 2021 | 8 | 402 | 100 | 70.6(66.15-75.05) |
| Nationwide | Yigzaw et al (61) | 2020 | 7 | 395 | 95.5 | 47.6(42.55-52.66) |
| D+L pooled ES | | | | | | 59.05(54.35-63.74) |

HINT: *-Four regions: Afar, Benishangul Gumz, Gambela, and Somali regions

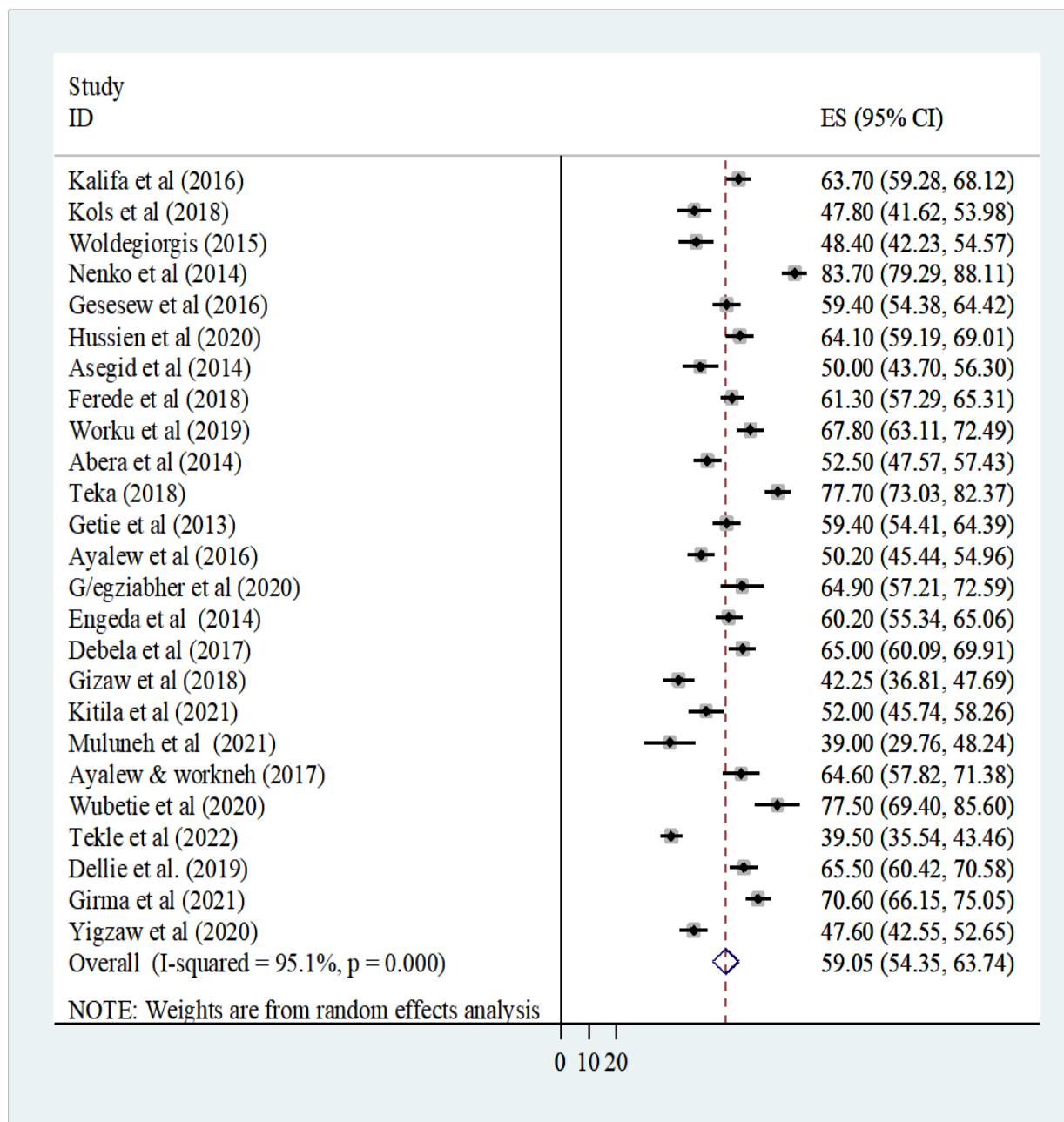


Figure 2: Forest plot for the pooled level of health professionals' intention to leave their job from public health facilities in Ethiopia.

3.3.2. Sub-group analysis

As a result of severe heterogeneity, we performed a subgroup analysis based on region, type of health facility, and health profession. In this regard, the prevalence was higher in the Addis Ababa study (73.19%), health center settings (63.7%), and laboratory professions (65.5%) when compared to the developing regions study, health post settings, and midwives' professions. Furthermore, the result of the sensitivity analysis revealed that no single study af-

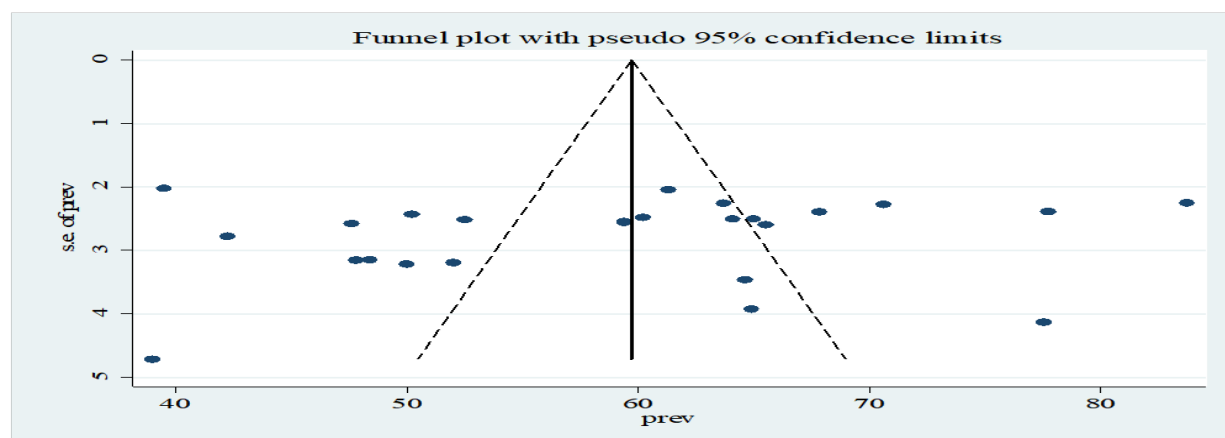
fects the pooled level of health professionals' intention to leave their job (Table 2).

3.3.3. Publication bias

With respect to publication bias, it was assessed by using a funnel plot, which showed a symmetrical distribution of included studies (Figure 3), and by applying Egger's test, which was also statistically significant ($P = 0.495$). Both methods revealed the absence of publication bias among studies.

Table 2: Subgroup analysis for the level of health professionals' intention to leave their job at public health facilities in Ethiopia.

| Groups | Number of studies | Prevalence rate (95% CI) | I ² (P value) |
|------------------------------------|-------------------|--------------------------|--------------------------|
| Region | | | |
| Oromia | 6 | 60.1(50.56-69.63) | 95.3 (P<0.01) |
| Nationwide | 4 | 46.1(40.85-51.35) | 78.1 (P<0.01) |
| Gambela | 1 | 48.4(42.23-54.57) | - |
| SNNPR | 2 | 66.93(33.9-99.95) | 98.6 (P<0.01) |
| Amhara | 8 | 61.86(58.57-65.16) | 71.8 (P<0.01) |
| Tigray | 1 | 64.9(57.21-72.59) | - |
| Afar, Beni, Gambela, Somali | 1 | 39.0(29.76-48.24) | - |
| Addis Ababa | 2 | 73.19(66.64-79.73) | 53.2 (P=0.14) |
| Health facilities | | | |
| Health center | 1 | 63.7(59.28-68.12) | - |
| Hospital | 9 | 62.42(53.36-71.48) | 96.0 (P<0.01) |
| Health center and hospital | 12 | 58.03(52.16-63.89) | 93.4 (P<0.01) |
| Health post | 3 | 51.82(36.27-67.37) | 96.6 (P<0.01) |
| Health profession | | | |
| Health professionals (unspecified) | 10 | 65.1(58.75-71.44) | 94.5 (P<0.01) |
| Anesthetics | 1 | 47.8(41.62-53.98) | - |
| Health extension workers | 3 | 51.82(36.27-67.37) | 96.6 (P<0.01) |
| Nurses | 8 | 58.34(51.47-65.2) | 90.9 (P<0.01) |
| Midwives | 1 | 39.0(29.76-48.24) | - |
| Laboratory | 1 | 65.5(60.42-70.58) | - |
| General practitioner | 1 | 47.6(42.55-52.66) | - |

**Figure 3:** A funnel plot to demonstrate the publication bias of studies for the pooled level of health professionals' intention to leave their jobs at Ethiopian public health facilities.

3.4. Factors associated with health professionals' intention to leave their jobs.

All authors have analyzed the potential factors influencing health professionals' intention to leave their job in Ethiopia using data from twenty-five studies. Variables that have been indicated as significant in at least three studies were included in the meta-analysis. In those studies, sex, year of experience, educational opportunity, autonomy, family arrangement, job-work environ-

ment, payment and any benefits, supervision and evaluation, appraisal and recognition, and organizational commitment were included. Finally, sex, job-work environment, payment and any benefits, supervision and evaluation, appraisal and recognition, and organizational commitment were significantly associated with health professionals' intention to leave their job (**Table 3**).

Table 3: A summary of factors associated with health professionals' intention to leave their job in Ethiopia.

| Variables | Categories | OR (95%CI) | P-value |
|----------------------------|---------------|-------------------|-----------|
| Sex | Male | 1.69 (1.31-2.18) | P <0.001 |
| | Female | 1 | |
| Year of experience | < 5 years | 1.56 (0.67-3.64) | P = 0.299 |
| | ≥ 5 years | 1 | |
| Education opportunity | Satisfied | 0.21 (0.04-1.06) | p = 0.059 |
| | Dissatisfied | 1 | |
| Autonomy | Satisfied | 1.164 (0.34-4.02) | P = 0.810 |
| | Dissatisfied | 1 | |
| Family arrangement | Loving within | 0.76 (0.35-1.68) | P = 0.503 |
| | Living out | 1 | |
| Job/work environment | Dissatisfied | 3.59 (2.05-6.29) | P <0.001 |
| | Satisfied | 1 | |
| Payment and any benefit | Dissatisfied | 7.37 (2.89-18.79) | P <0.001 |
| | Satisfied | 1 | |
| Supervision and evaluation | Dissatisfied | 2.99 (2.27-3.93) | P <0.001 |
| | Satisfied | 1 | |
| Appraisal and recognition | Dissatisfied | 3.4 (2.62-4.41) | P <0.001 |
| | Satisfied | 1 | |
| Organizational commitment | Low | 1.9 (1.04-3.48) | P = 0.038 |
| | High | 1 | |

Accordingly, male health professionals were 1.7 times more likely to intend to leave their jobs than females (AOR: 1.69, 95%CI: 1.31-2.18). Health professionals who were dissatisfied with their job or work environment, payment or any benefit, supervision and evaluation, and appraisal and recognition were more than three times (AOR: 3.59, 95% CI: 2.05–6.29), seven times (AOR: 7.37, 95%CI: 2.89-18.79), three times (AOR:

2.99, 95% CI: 2.27–3.93), and three times (AOR: 3.4, 95% CI: 2.62-4.41) as likely to intend to leave their job as their counterparts, respectively. In addition, health professionals with a low organizational commitment have around two times the intention to leave their job as those with high organizational commitment (AOR: 1.9, 95%CI: 1.04–3.48) (**Table 3 and Figures 4–13**).

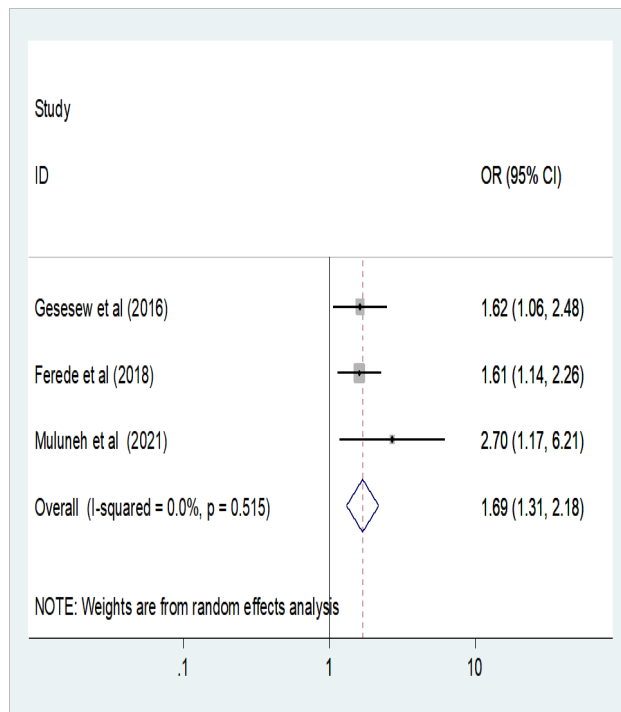


Figure 4: Forest plot showing the pooled odds ratio of sex of respondents in association with ITL

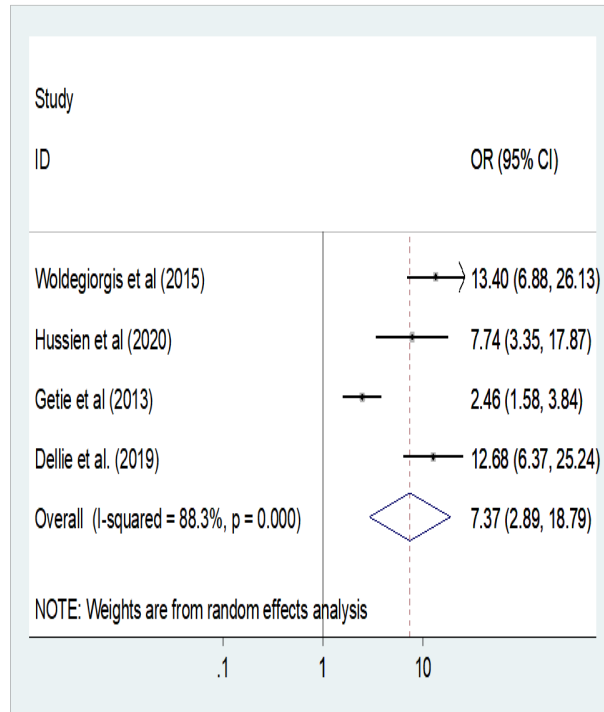


Figure 6: Forest plot showing the pooled odds ratio of payment and any benefit in association with ITL

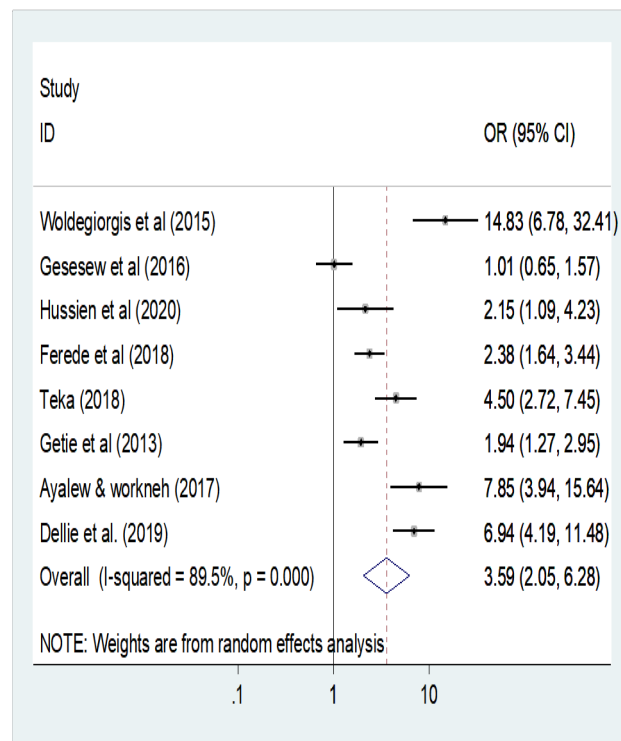


Figure 5: Forest plot showing the pooled odds ratio of job/work environment in association with ITL

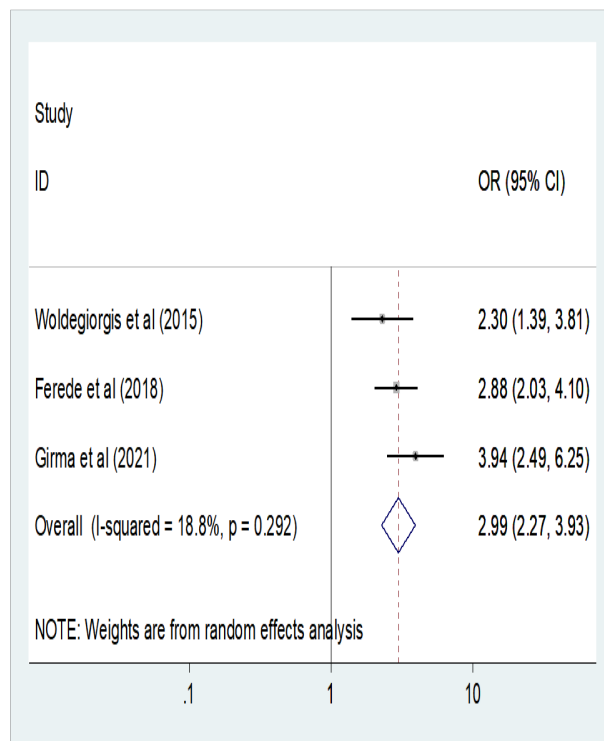


Figure 7: Forest plot showing the pooled odds ratio of supervision and evaluation in association with ITL

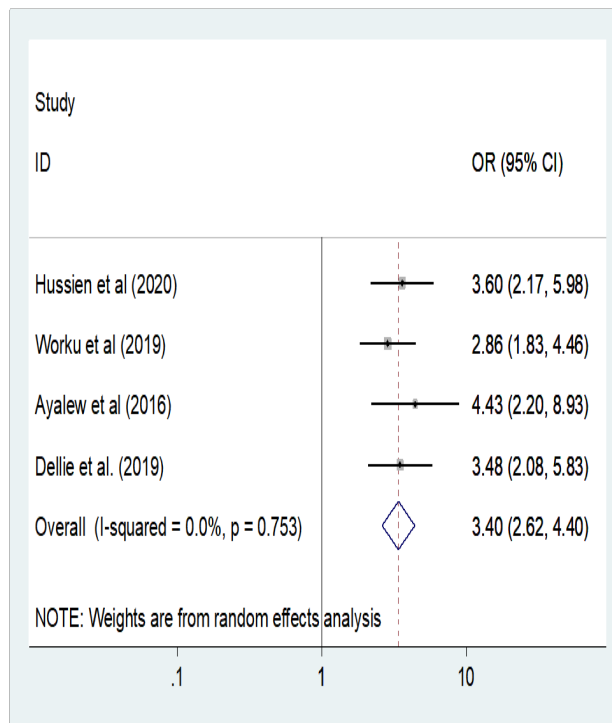


Figure 8: Forest plot showing the pooled odds ratio of appraisal and recognition in association with ITL

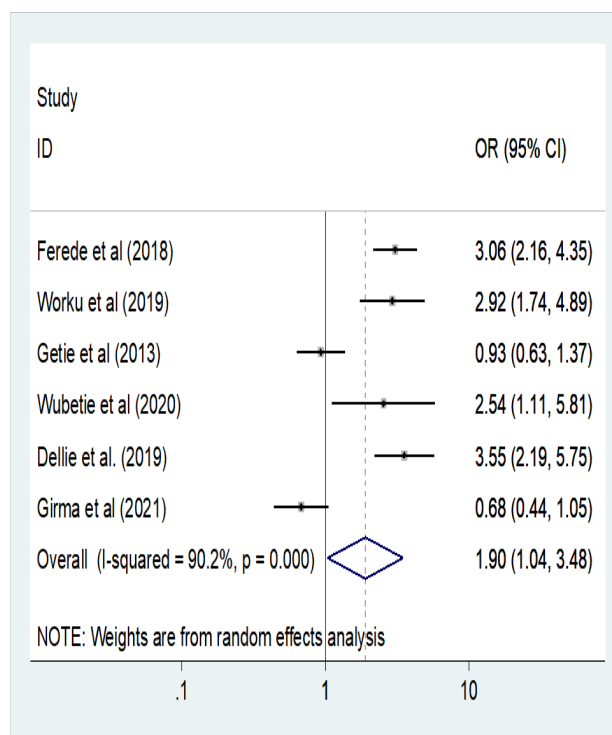


Figure 9: Forest plot showing the pooled odds ratio of organizational commitment in association with ITL.

Discussion

According to this study, the pooled prevalence of intention to leave their job among Ethiopian health professionals was 59.05%. This finding was higher than the studies conducted in Israel (9%) (29), Europe (33%) (28), Australia (21%) (63), Switzerland (16%) (64), Brazil (21.1%) (65) and Saudi Arabia (26%) (66), Tanzania (18.8%), Malawi (26.5%), South Africa (41.4%) (67) and Sub-Saharan African countries (51.96%) (11). The higher level of health professionals' intention to leave their job in the present study may be due to variations in motivational and hygienic factors for retention. This disparity could be explained by developed countries' superior health professional retention mechanisms, such as modern health facilities, an effort to increase the numbers of nursing staff, pay incentives, opportunities for flexible employment, and career staff advancement compared to sub-Saharan African countries (68).

In addition, the difference between the three African countries could result from on-going interventions to address this problem in all three countries by gathering better information on job satisfaction. In this regard, factors like work overload, a poor economic situation, little chance of promotion, lack of recognition, and low job rewards are behind health workers' intentions to leave their profession in developing countries. In contrast, the findings of this study were slightly lower than those of studies conducted in China (63.88%) (69) and Jordan (60.9%) (70). The possible reason for this discrepancy might be due to the difference in research methodology. Therefore, health professionals' intention to leave their job remains a concern to the government and the public health sectors in Ethiopia.

Subgroup analysis indicated that the prevalence of health workers' intention to leave their job was higher in Addis Ababa (73.19%), health centers (63.7%), and laboratory professionals (65.5%). It indicated that there is substantial heterogeneity in the issue under study across region, facility, and type of profession. Such differences might be due to health workers' social and cultural variation across the respective regions. Nevertheless, their job in Addis Ababa affects organizational costs and professional crises. Furthermore, the national scarcity of laboratory professionals leads to a high intention to leave their job in search of a better paying position. Hence, special attention is given to the health sectors to reduce health professionals' intentions to leave their jobs in those specific groups.

The meta-analysis identified six predictors of intentions to leave: sex, job-work environment, payment and any benefits, supervision and evaluation, appraisal and recognition, and organizational commitment, which can help devise effective strategies to reduce the intention of health professionals to leave their job.

In this study, males were nearly two times more likely

to intend to leave than females, which was similar to the studies from Saudi Arabia (27) and Iraq (26). One possible explanation is that females prefer to be stable before moving out more than males. But it was different from studies done in Tanzania and South Africa, which showed that 68.2% and 77% of females, respectively, intended to leave (26). In addition, gender was not cited as an influencing factor for the intention to leave in another South African study (71). The difference in study participants and the study setting may be the reason for this discrepancy.

According to the findings of this study, health professionals who were dissatisfied with their job or work environment were nearly three and a half times more likely to intend to quit. This finding is in agreement with studies carried out in South Africa (25), Pakistan (24), as well as with Herzberg's two-factor theory of motivation (72), which notes that recognition, working conditions, the type of work, and responsibility are all factors that affect an employee's decision to remain at their current position or leave an organization. Another possible explanation is that poor working conditions or a lack of important workplace amenities, such as a proper office, furniture, a house, and health and safety provisions, reduce employee convenience and decrease their intention to stay in jobs. Health workers who dislike their jobs and do not feel a sense of accomplishment may prefer to leave rather than stay.

The current study showed that, when compared to their counterparts, health workers who were dissatisfied with their salary or any benefits were over seven times more likely to plan to leave. The output is in line with research conducted in Malawi (73), Sweden (22, 23) and China (74). This might be the case because one of the factors that motivates employees to stay in their current positions is a higher salary and any additional benefits. This may also be explained by the unequal tasks and benefits provided, which may encourage workers to look for new employment, as opposed to satisfied workers, who are more likely to stay with their organizations because their needs are being met.

The likelihood of intending to leave their job was three times higher among health professionals who were dissatisfied with their evaluation and supervision than among their colleagues. This result is consistent with research from public health facilities in Turkey (21) and Japan (75). This result can be explained by the fact that feelings of accountability, sincerity, and autonomy are enhanced by supervisory support, recognition, and positive feedback for individual performances. Due to poor supervisor support brought on by partiality, employees may feel less satisfied at work and want to quit their job. In addition, health professionals who were dissatisfied with their appraisal and recognition were three and a half times more likely than their counterparts to intend to leave their job. This finding is supported by a study conducted in Jordan (76), and Sweden (22, 23), which

found that inappropriate health workers' performance appraisal and recognition had both direct and indirect effects on their intention to remain in their current positions. It may be due to a lack of acknowledging the employees' efforts and their accomplishments through praise, respect, and thanks. This also may be due to the belief of professionals that it would be expensive to leave organizations that pay or recognize them well because the opportunities might be hard to find elsewhere.

Furthermore, health professionals with a low level of organizational commitment are twice as likely to leave their jobs as those with a high level of organizational commitment. A similar conclusion was reached in Jordan (77) and Turkey (19, 20). This result can be explained by the fact that health professionals who do not feel obligated to stick around and support their organization might express a stronger desire to leave than to stay.

Strength and Limitation

Although this study has an important finding on the prevalence and factors associated with health professionals' intention to leave their job at the national level, it has the following limitations: Even though the majority of the studies were of high quality, all of the primary studies in this study were cross-sectional in nature. In addition, although we used diverse search strategies to find all possible available literature, some gray literature, such as conference proceedings, was difficult to find.

5. Conclusion and Recommendation

In the current study, there was a high level of health professionals' intention to leave their job, and there is substantial heterogeneity under study across region, facility, and type of profession. Sex, job-work environment, payment and any benefits, supervision and evaluation, appraisal and recognition, and organizational commitment were the determinants of health professionals' intention to leave their job. Therefore, design a positive working atmosphere, monitoring and evaluation strategies, and sufficient development and career opportunities.

Abbreviations and acronyms

ITL (Intention to Leave); LMIC (Low- and Middle-Income Countries); NOS (Newcastle-Ottawa Scale); PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses); and WHO (World Health Organization)

Declarations

Ethical approval and consent to participate

Not applicable

Consent for publication

Not applicable

Availability of data and material

Data will be made available on request.

Competing interests

There are no potential conflicts of interest.

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Authors' Contributions

GAZ, AM, and TLL performed the literature search,

data extraction, and data analysis, wrote the manuscript, and reviewed and revised the paper. The final manuscript has been reviewed and approved by all authors.

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