

Turnover Intention among Health Professionals Working at Primary Public Health Facilities in Addis Ababa, Ethiopia: Facility Based Cross-Sectional Study

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Abstract

Background: Health workforce shortage and retention problems have been the critical challenges in the health sector. Turnover is one of the main reasons for the shortfalls and unbalanced distribution of health personnel. Therefore, this study aims to determine the magnitude and factors associated with turnover intention.

Methods: A health facility-based cross-sectional study was conducted in primary public health care facilities in Addis Ababa. A total of 402 study participants were included by a simple random sampling technique. Data were collected by using a structured and self-administered checklist. Descriptive analysis, as well as bivariable and multivariable logistic regression, were done. The odds ratio along with a 95% confidence interval were estimated to measure the strength of the association. The level of statistical significance was declared at a p-value of ≤ 0.05 .

Result: The magnitude of turnover intention was [70.7%, 95% CI: (66.0%, 74.9%)]. High affective commitment to their health facility (Adjusted Odds Ratio [AOR]: 0.3; 95% Confidence Interval [CI]: 0.1-0.9), low continuance commitment (AOR: 9.6; CI: 2.4-38.0), low satisfaction with remuneration (AOR: 15.3; CI: 6.0-38.9), low satisfaction with supervision (AOR:4.1; CI: 1.5-11.1), and low satisfaction with autonomy (AOR:3.3; CI: 1.1-10.0) were found to be significant determinants of turnover intention.

Conclusion: Turnover intention among health professionals is relatively high and is associated with high affective commitment, low continuance commitment, and unsatisfaction with remuneration, supervision, and autonomy. Therefore, leadership and human resource management training and participation of health professionals in decision making are required.

Keywords: Turnover intention, Health professional, Primary health care, Addis Ababa

Introduction

The health workforce is one of the building blocks of the health system. Without the health professionals, global and national efforts to achieve health-related goals cannot be reached to the set targets. Health workforce shortage and retention problems have been the major challenges in the health sector. Turnover is one of the main reasons for the shortfalls and unbalanced distribution of health personnel [1-4].

Turnover of health professionals is an additional burden for Africa where the health worker to population ratio is very low and the available health professionals are not sufficient enough to meet the needs of the rapidly growing population. The shortage of health professionals and the disease burden is very noticeable in Africa, especially Sub-Saharan countries [5,6].

Better retained health professionals give a positive contribution to the delivery of quality health service because it increases competencies, gives rise to team relations, and tightens up the bond of health care professionals with local communities. On the contrary, high staff turnover imposes a negative impact on health service delivery by increasing workload, decreasing work morale, increasing disruptions, and decreasing institutional knowledge [7,8].

Ethiopia has the highest number of health professionals from Sub-Saharan African countries. However, it has been facing shortages in skilled health professionals. It is a Human Resource for Health (HRH) crisis. The shortage of HRH has been accelerated by various factors and resulted in health worker migration from the public sector, geographical imbalances in workforce staffing, and increasing attrition rates. The Ethiopian health system is affected by workforce shortage, failures in employing professionals at the right time, retaining them, managing them, and budget shortages with irregular continuing education [9-11].

Even though health work force is the backbone to ensure health care service quality, turnover intention and its associated factors in different health care professionals in Ethiopia is not adequately investigated in previous studies. Therefore, this study was aimed to assess the magnitude of turnover intention and associated factors among health professionals in primary public health care facilities health professionals in Addis Ababa, Ethiopia.

Methods

Study design and setting

We conducted a health facility-based cross-sectional study in primary public health care facilities in Addis Ababa. There are 98 health centers, six referral hospitals, five specialized hospitals, and two military hospitals in Addis Ababa. According to the Addis Ababa City Administration Health Bureau data, there are a total of 6,860 health professionals working in primary public health facilities in the city in 2020. This study included health professionals working in primary health care facilities. We conducted this study from January to August 2020.

Study population

All health professionals working at primary public health care facilities in Addis Ababa were the source population for this study. The study population was health professionals who were working at 20 selected public primary health facilities.

Inclusion and exclusion criteria

Inclusion criteria

Health professionals employed to work in the selected primary health care facility and served for one year or more in the health facility

Exclusion criteria

We excluded health professionals who were contract staff, those who were ill, on annual and maternity leave.

Sample size and sampling procedure

The sample size was determined by using a single population proportion formula. The magnitude of turnover intention, according to a study in North Shoa Zone, Amhara Region, is 61.3%. We used a two-sided 95% confidence level and 5% margin of error to determine the sample size.

By considering a 10% non-response rate, the final sample size was 402 health professionals.

Out of 98 functional health centers found in Addis Ababa City, we included 20% (20) in the study. Therefore, we selected two health centers from each of the ten sub-cities by lottery method.

Moreover, we allocated the study participants proportionally in terms of number and profession. Finally, we enrolled the study subjects by a simple random sampling technique.

Socio-demographic Characteristics Questionnaire

To get data related to participants’ socio-demographic characteristics (sex, age, field of study and year level), questions were specifically designed by the researcher. In addition to items on socio-demographic information, questions regarding purpose of internet use and amount of time spend online were included.

Operational definitions

Turnover intention: refers to when the percentage mean score of a given turnover intention variable is greater than or equal to 50%.

Percentage mean score: is the proportion of actual score of each respondent for individual Likert scale variable minus potential minimum score to a possible maximum minus potential minimum score [12].

Low organizational commitment: refers to when the percentage mean scores of a given organizational commitment variable is less than 50%.

High organizational commitment: refers to when the percentage mean scores of a given organizational commitment variable is greater than or equal to 50%.

High satisfaction: refers to when the percentage mean scores of a given satisfaction variable is greater than or equal to 50%.

Low satisfaction: refers to when the percentage mean scores of a given satisfaction variable is less than 50%.

Data collection procedure and quality assurance

We collected the data by using a structured and self-administered questionnaire. We provided a one-day training on data collection for six data collection facilitators. Data collection facilitators were BSc nurses and Health officers working in health facilities other than the data collection site public health facilities.

The supervisor checked the completeness, consistency, and appropriateness of the collected data every day. To assure data quality, pretesting the questionnaire on public primary health care workers not selected for the actual study was conducted. The pretest was done among 20, 5% of study participants, health professionals working in public primary health care facilities in Addis Ababa.

Data processing and analysis

The data were entered into Epi Info window version 7.2 and exported to Statistical Package for Social Science (SPSS) window version 23 software for data analysis. After the data cleaned, a descriptive analysis of rates, ratios, proportions, means, and standard deviations calculated. For the analytical part, we performed bivariable and multivariable binary logistic regressions. We also calculated the percentage mean score to determine the cutoff point for satisfaction level and organizational commitment. We used a P-Value of 0.05 with a confidence interval of 95% to determine the level of significance and checked the model fitness by the Hosmer Lemeshow test. The odds ratio along with 95% CI was estimated to measure the strength of association.

Ethical considerations

Ethical clearance to conduct this study was issued by the Ethical Review Board of St. Paul’s Hospital Millenium Medical College. The data was collected after the purpose or the objective of the study was presented to each participant and written informed consent was obtained. Any personal identifying variables of each participant were kept confidential.

Results

Socio-demographic characteristics

A total of 402 participants were interviewed. Three hundred twenty-four (80.6%) of the participants are males and the mean age of participants was 36.6 years (SD ± 7.2). Three hundred fifty-two (87.6%) are bachelor’s degree holders and 226 (56.2%) had 6-15 years of work experience (Table 1).

Organizational commitment

The affective, normative and continuance commitments of the health professionals to their health facility were 61.7% (95 CI: 56.9% - 66.3%), 83.8% (95 CI: 79.9% - 87.1%) and 11.9% (95 CI: 9.1% - 15.5%) respectively (Table 2).

Table 1. Sociodemographic characteristics of health professionals working in primary health care facilities in Addis Ababa, Ethiopia, 2020.

| Variable (n=402) | Frequency | Percentage |
|---------------------|-----------|------------|
| Sex | | |
| Male | 324 | 80.6 |
| Female | 78 | 19.4 |
| Age in years | | |
| <30 | 71 | 17.7 |
| 30-39 | 210 | 52.2 |
| 40-49 | 94 | 23.4 |
| >=50 | 27 | 6.7 |
| Marital status | | |
| Married | 247 | 61.4 |
| Single | 155 | 38.6 |
| Education | | |
| Diploma | 14 | 3.5 |
| Degree | 352 | 87.6 |
| Medical doctor | 13 | 3.2 |
| Master’s degree | 23 | 5.7 |
| Experience in years | | |
| <5 | 138 | 34.3 |
| 6-15 | 226 | 56.2 |
| 16-25 | 23 | 5.7 |
| >=26 | 15 | 3.8 |
| Have children | | |
| Yes | 173 | 43.0 |
| No | 229 | 57.0 |

Job satisfaction

More than half of the health professionals were satisfied with the workload (86.3%), work environment (76.6%), and their peer group (93.5%). However, less than half of the health professionals were satisfied with remuneration (32.3%), supervision (46.3%), their autonomy (47.3%), the training and development opportunities (13.2%), and recognition (11%) (Table 3).

Turnover intention

Out of 402 health professionals working at public primary health facilities in Addis Ababa, 284 (70.6%, 95% CI: (66.0%, 74.9%) of them have an intention to leave their current health facility.

Factors associated with turnover intention

In a bivariable analysis, seventeen socio-demographic, organizational commitment, and job satisfaction factors were analyzed for their possible association with the turnover intention of health professionals.

In multivariable analysis, the odds of turnover intention is 0.1 times lower among health professionals with 6-15 years of experience, (Adjusted Odds Ratio [AOR]: 0.1; 95% Confidence Interval [CI]: 0.01-0.3), 0.1 times lower among 16-25 years of experience, (AOR:0.1; CI: 0.01-0.2) and 0.3 times lower among ≥ 26 years of experience, (AOR: 0.3; CI: 0.1-0.8) compared to those with <5 years of experience.

Health professionals who have a low affective commitment to their health facility have 0.3 times lower odds of turnover intention (AOR: 0.3; CI: 0.1-0.9) than their counterparts. But health professionals who have low continuance

commitment have 9.6 times higher odds of turnover intention (AOR: 9.6; CI: 2.4-38.0) compared to those with high continuance commitment.

The odds of turnover intention is 15.3 times higher (AOR: 15.3; CI: 6.0-38.9) among health professionals who have low satisfaction with remuneration, 4.1 times higher (AOR: 4.1; CI: 1.5-11.1) among health professionals who have low satisfaction with supervision and 3.3 times higher (AOR: 3.3; CI: 1.1-10.0) among health professionals who have low satisfaction with autonomy (Table 4).

Discussion

In this study, more than half of the respondents (70.6%) had the intention to leave their current health facilities. In this study, experience, affective commitment, continuance commitment, satisfaction with remuneration, satisfaction with supervision, and satisfaction with autonomy were determinants of turnover intention among health workers.

The magnitude of turnover intention, we found in this study, is higher than studies conducted among primary health care facilities in Jimma Zone (63.7%) and East Gojam Zone (59.4%) [13,14]. Studies conducted among hospitals in Gondar also found that turnover intention is lower (52.5%) than the findings in our study [15]. This variation could be due to the difference in job opportunities among towns and big cities like Addis Ababa. The other reason could be the difference in study setting as this study was conducted at the health center level but the study in Gondar was conducted at the hospital level. On the other hand, a study among nurses working at the emergency department in Addis Ababa found a higher turnover intention (77.5%) than the findings of this study [16].

Table 2. Organizational commitments of health professionals working at public primary health facilities in Addis Ababa, Ethiopia, 2020.

| Variables (n=402) | Frequency | Percentage | 95% C.I. for percentage | |
|------------------------|-----------|------------|-------------------------|-------|
| | | | Lower | Upper |
| Affective commitment | | | | |
| High | 248 | 61.7 | 56.9 | 66.3 |
| Low | 154 | 38.3 | 33.7 | 43.2 |
| Normative commitment | | | | |
| High | 337 | 83.8 | 79.9 | 87.1 |
| Low | 65 | 16.2 | 12.9 | 20.1 |
| Continuance commitment | | | | |
| High | 48 | 11.9 | 9.1 | 15.5 |
| Low | 354 | 88.1 | 84.5 | 90.9 |

Table 3. Job satisfaction of health professionals working at public primary health facilities in Addis Ababa, Ethiopia, 2020.

| Variables (n=402) | Frequency | Percentage | 95% C.I. for percentage | |
|---|-----------|------------|-------------------------|-------|
| | | | Lower | Upper |
| Satisfied with workload | | | | |
| High | 347 | 86.3 | 82.6 | 89.3 |
| Low | 55 | 13.7 | 10.7 | 17.4 |
| Satisfied with work environment | | | | |
| High | 308 | 76.6 | 72.2 | 80.5 |
| Low | 94 | 23.4 | 19.5 | 27.8 |
| Satisfied with remuneration | | | | |
| High | 130 | 32.3 | 28.0 | 37.1 |
| Low | 272 | 67.7 | 62.9 | 72.1 |
| Satisfied with supervision | | | | |
| High | 186 | 46.3 | 41.5 | 51.2 |
| Low | 216 | 53.7 | 48.8 | 58.6 |
| Satisfied with autonomy | | | | |
| High | 190 | 47.3 | 42.4 | 52.2 |
| Low | 212 | 52.7 | 47.9 | 57.6 |
| Satisfied with peer group | | | | |
| High | 376 | 93.5 | 90.7 | 95.6 |
| Low | 26 | 6.5 | 4.5 | 9.3 |
| Satisfied with Training and development | | | | |
| High | 53 | 13.2 | 10.2 | 16.8 |
| Low | 349 | 86.8 | 83.2 | 89.8 |
| Satisfied with recognition | | | | |
| High | 44 | 11 | 8.3 | 14.4 |
| Low | 358 | 89 | 85.6 | 91.7 |

Table 4. Factors associated with the turnover intention of health professionals working at public primary health facilities in Addis Ababa, Ethiopia, 2020.

| Variable | Turnover Intention | | COR (95% C.I.) | AOR (95% C.I.) | P-value |
|---|--------------------|------------|-------------------|-------------------|---------|
| | Yes (%) | No (%) | | | |
| Sex | | | | | |
| Male | 224 (69.1) | 100 (30.9) | 0.7 (0.4-1.2) | 0.7 (0.3-1.8) | 0.50 |
| Female | 60 (76.9) | 18 (23.1) | 1 | 1 | |
| Age in years | | | | | |
| <30 | 46 (64.8) | 25 (35.2) | 1 | 1 | |
| 30-39 | 156 (74.3) | 54 (25.7) | 1.6 (0.9-2.8) | 3.1 (0.9-10.1) | 0.06 |
| 40-49 | 74 (78.7) | 20 (21.3) | 2.0 (1.0-4.0) | 3.5 (0.7-16.6) | 0.12 |
| >=50 | 8 (29.6) | 19 (70.4) | 0.2 (0.1-0.6) | 0.6 (0.1-5.3) | 0.61 |
| Marital status | | | | | |
| Single | 78 (50.3) | 77 (49.7) | 0.2 (0.1-0.3) | 0.5 (0.2-1.6) | 0.26 |
| Married | 206 (83.4) | 41 (16.6) | 1 | 1 | |
| Experience in Years | | | | | |
| <5 (Ref.) | 115 (83.3) | 23 (16.7) | 1 | 1 | |
| 6-15 | 157 (69.5) | 69 (30.5) | 0.1 (0.0-0.2) | 0.1 (0.01-0.3) | 0.00* |
| 16-25 | 9 (39.1) | 14 (60.9) | 0.1 (0.0-0.3) | 0.1 (0.01-0.2) | 0.00* |
| >=26 | 3 (20.8) | 12 (80.0) | 0.5 (0.3-0.8) | 0.3 (0.1-0.8) | 0.02* |
| Have children | | | | | |
| No | 147 (64.2) | 82 (35.8) | 0.5 (0.3-0.7) | 1.2 (0.4-3.6) | 0.8 |
| Yes | 137 (79.2) | 36 (20.8) | 1 | 1 | |
| Affective commitment | | | | | |
| Low | 101 (65.6) | 53 (34.4) | 0.7 (0.1-1.0) | 0.3 (0.1-0.9) | 0.03* |
| High | 183 (73.8) | 65 (26.2) | 1 | 1 | |
| Normative commitment | | | | | |
| Low | 63 (96.9) | 2 (3.1) | 16.5 (4.0-68.7) | 6.4 (0.8-50.8) | 0.08 |
| High | 221 (65.6) | 116 (34.4) | 1 | 1 | |
| Continuance commitment | | | | | |
| Low | 267 (75.4) | 87 (24.6) | 5.6 (2.9-10.6) | 9.6 (2.4-38.0) | 0.001* |
| High | 17 (35.4) | 31 (64.6) | 1 | 1 | |
| Satisfied with workload | | | | | |
| Low | 48 (87.3) | 7 (12.7) | 3.2 (1.4-7.4) | 1.0 (0.2-4.3) | 0.99 |
| High | 236 (68.0) | 111 (32.0) | 1 | 1 | |
| Satisfied with work environment | | | | | |
| Low | 85 (90.4) | 9 (9.6) | 5.2 (2.5-10.7) | 1.0 (0.2-4.5) | 0.96 |
| High | 199 (64.6) | 109 (35.4) | 1 | 1 | |
| Satisfied with remuneration | | | | | |
| Low | 242 (89.0) | 30 (11.0) | 16.9 (10.0-28.7) | 15.3 (6.0-38.9) | 0.00* |
| High | 42 (32.3) | 88 (67.7) | 1 | 1 | |
| Satisfied with supervision | | | | | |
| Low | 180 (83.3) | 36 (16.7) | 3.9 (2.5-6.2) | 4.1 (1.5-11.1) | 0.01* |
| High | 104 (55.9) | 82 (44.1) | 1 | 1 | |
| Satisfied with autonomy | | | | | |
| Low | 159 (75.0) | 53 (25.0) | 1.6 (1.0-2.4) | 3.3 (1.1-10.0) | 0.03* |
| High | 125 (65.8) | 65 (34.2) | 1 | 1 | |
| Satisfied with peer group | | | | | |
| Low | 22 (84.6) | 4 (15.4) | 2.4 (0.8-7.1) | 0.5 (0.1-4.4) | 0.57 |
| High | 262 (69.7) | 114 (30.3) | 1 | 1 | |
| Satisfied with training and development | | | | | |
| Low | 258 (73.9) | 91 (26.1) | 2.9 (1.6-5.3) | 0.2 (0.0-1.2) | 0.08 |
| High | 26 (49.1) | 27 (50.9) | 1 | 1 | |
| Satisfied with recognition | | | | | |
| Low | 267 (74.6) | 91 (25.4) | 4.7 (2.4-8.9) | 1.0 (0.2-5.3) | 0.98 |
| High | 17 (38.6) | 27 (61.4) | 1 | 1 | |

A study done in Sidama among nurses also found a lower proportion of turnover intention (50%) than the present study, which can be explained by the difference in the study participants, this study includes all health professionals unlike that of the study in Sidama. Other studies conducted in Tanzania, Malawi, and South Africa revealed a lower proportion of turnover intention (18.8%, 26.5%, and 41.4%), respectively [17,18]. This variation may be because of successful ongoing interventions to address the problem in these countries. Also, a study done among doctors in China and nurses in Italy indicated the magnitude of turnover intention is 36% and 21% [19,20]. This variation may be due to the presence of differences in workplace infrastructure.

Sociodemographic characteristics such as marital status, educational level, and having children were not determinants of the health professional intent to leave their current health facility. Similar to this finding, in a study conducted in two different hospitals in South Africa gender was stated as not influencing the intent to leave [21]. Another study among South African nurses also showed that socioeconomic and demographic factors such as age, marital status, and educational level were not associated with the turnover intention [22].

In this study, work experience is significantly associated with the health professionals' turnover intention. Health professionals with work experience of fewer than five years have a higher intent to leave

their current health facilities than the more experienced ones. It could be because the more experienced health professionals have family and social responsibility than the new graduates. This finding is consistent with the study done in Saudi Arabia and Italy, they found that health professionals with lower experience have more intention to leave their current work [20]. Other studies in Jimma and Sidama stated work experience is not an independent determinant of turnover intention [13,17]. However, our finding contradicts a previous study done in Gondar as well as a multinational study among Sub-Saharan African countries. These studies found that the higher experience the higher intention to leave their organization or change their job [15,23].

A study in Saudi Arabia stated that people who have a lower commitment to their organization have a higher intention to quit their job from their current organization [24]. Likewise, our study found that health professionals who have low continuance commitment to their organization have a higher intention to leave. Similarly, a study among nurses working in Amhara Region stated having a higher continuance commitment is a significant determinant of nurses' intent to stay in their current health facility [9]. Another study in the Philippines also revealed that health professionals who have low organizational commitment have high intent to leave [25]. However, this study found that health professionals having a higher affective commitment to their health facility have higher intent to leave. Though this finding contradicts the previous study in Addis Ababa [16], it might be that those health professionals who have high affection for their health facility may intend to leave their job if they are not satisfied with the organizational management.

One of the aspects of job satisfaction which is remuneration was also among the significant predictors in which health professionals who have low satisfaction with the salary and benefits provided have a higher thought of leaving their current work than their counterparts. This finding is consistent with studies conducted in North Shoa, China, and South Africa [12,19,22]. This can be explained in that health professionals who perceive that the financial or nonfinancial incentives are not adequate to fulfill their needs may prefer leaving their health facility. Whereas studies done in Sidama Zone and Ghana revealed that remuneration was not associated with the intent to leave their current job [8,17].

In this study, health professionals who have low satisfaction with the supervision by their managers were more likely to consider leaving. This finding is also supported by a study conducted in North Shoa and Turkey [12,26]. Poor supervision can disturb the working atmosphere and the motive to work with passion. A good working atmosphere is characterized by a pleasant interaction of colleagues working in the same unit and with different units by a good team spirit. Appreciation of good performance and collegial behavior would decrease health professionals' intention to leave their workplace [27].

In this study, satisfaction with work autonomy is also significantly associated with the turnover intention of health professionals from their workplace in which health professionals who are less satisfied with their work autonomy have higher intent to leave. This finding is in line with the findings of a study done in South Africa [22]. On the other hand, a study conducted in East Gojam revealed that autonomy is not an independent determinant of intention to leave the current organization [28].

A study done in Jimma showed that dissatisfaction with recognition is a factor for intention to leave and a study in East Gojam showed that promotion and training opportunity are factors for intent to leave [28,29]. But in this study, 86.8% of the participants responded to have low satisfaction with training and development and 89% of the participants have low satisfaction with recognition and incentives. However, these are not independent determinants for intention to leave. The health professionals are not satisfied with these job satisfaction indicators but it does not necessarily lead them to leave their workplaces. There are other factors other than training and development and recognition and incentives which are responsible enough for the health care worker's intention to leave.

The major limitation for this study might be, the reliability of the information is based on the genuine response of the health professional's record on the self-administered checklist.

Conclusion

Close to three-fourth of health professionals wanted to leave their current health facility. Though more than half of the health professionals have affection for their health facility and have a good normative commitment, a very small proportion of them have continuance commitment. Health professionals with less than five years' experience have a higher intention to leave. Health professionals who have low continuance commitment and unsatisfied with remuneration, supervision, and autonomy have a higher intention to leave their current health facility. Health professionals who have higher affection for their health facility have also a higher intention to leave. Health leadership capacity development, designing incentive strategies for health professionals, and engaging health professionals in decision making may help to retain them at their current health facility.

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Author's contribution

FG designed the study, participated in field investigation, conducted analysis, and wrote the manuscript. FW, MA and HB participated in designing the study and manuscript writing. MA participated in field investigation and data analysis. All authors reviewed the manuscript and approved the submission.

Ethical approval and consent to participate

This study was approved by the Ethical Review Board of St. Paul's Hospital Millennium Medical College and written consents were obtained from each participant.

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