



Original Research

Assessment of Job Satisfaction and Its Associated Factors Among Health Professionals in Dire Dawa Public Health Facilities, Eastern Ethiopia, 2021Tsedey Addisu¹, Yitagesu Sintayehu², Mickiale Hailu^{2*}¹Dilchora Hospital, Dire Dawa City Administration, Dire Dawa, Ethiopia²Department of Midwifery, College of Medicine and Health Sciences, Dire Dawa University, Ethiopia**Abstract**

Background: The shortage of health professionals and job dissatisfaction is a worldwide phenomenon, including in Ethiopia. It has an impact on the organization, including loss of knowledge gained by the employee while on the job, understaffing, which in turn leads to decreased effectiveness and productivity of the remaining staff, and organizations' costs relating to recruitment and selection, training of new employees, personnel processes, and induction. Studies show that the level of nurse job satisfaction was 48% in 2019 in Ethiopia. The study aim was to assess job satisfaction and associated factors among health professionals in Dire Dawa public health facilities in 2021.

Method: A cross-sectional study design was employed, and a simple random sampling method was used to select study participants. Data was collected and entered into EPI Data and SPSS version 23 for analysis. Variables with $p < 0.25$ on bivariable logistic regression analysis were candidates for multivariable logistic regression analysis, and statistical significance was declared at a p -value < 0.05 and 95% CI.

Results: The overall level of job satisfaction among health care professionals was 214 (54.6, 95% CI (49.2–59.7)). Health care workers who felt the presence of motivation (AOR=2.1, 95% CI (1.1–4.1)), chance of career advancement (AOR=2.4, 95% CI (1.3–4.3)), training opportunity (AOR=1.9, 95% CI (1.1–3.5)), good working relationship with their supervisor (AOR=2.1, 95% CI (1.2–3.8)), co-workers (AOR=2.2, 95% CI (1.1–4.5)), and part-time work opportunity (AOR=2.0, 95% CI (1.1–3.9)) were determinants of job satisfaction.

Conclusion: The study found a moderate level of job satisfaction. Variables such as presence of motivation, career advancement, training, relation with supervisors, co-workers, and part-time work opportunities were found to be significantly associated with job satisfaction. Thus, the Dire Dawa health bureau and health facility administrators should give attention to developing structures and systems that can satisfy career growth opportunities, among others.

Keywords: Health Professionals, Job Satisfaction, Public Health Facility, Dire Dawa

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1. Introduction

Job satisfaction refers to the attitude and feelings people have about their work. Positive and favorable attitudes towards the job indicate job satisfaction. Negative and unfavorable attitudes towards the work or job indicate job dissatisfaction. The phenomenon of job satisfaction and dissatisfaction is the function of two needs major systems of physiology and psychology. Physiological needs are called extrinsic or hygiene factors, which include payment, supervision, fringe benefits, operating procedures, coworkers (colleagues), & communication. Psychological needs are called intrinsic or motivator factors, which include the nature of work, promotion, and contingent rewards. The motivation factors come from the nature of the job itself, not from external rewards, and their absence can lead only to a lack of satisfaction ^[1,2].

Both extrinsic and intrinsic facets of the job should be represented, as equally as possible, in a composite measure of overall job satisfaction. The World Health Organization (WHO) Global Strategy on Human Resources for Health Workforce 2030 sets out the policy agenda to ensure a workforce that is fit for purpose to attain the targets of the Sustainable Development Goals (SDGs). The motivation of health care workers can initiate them to exert and maintain an effort towards organizational goals. Motivation depends upon many factors, and job satisfaction is one of the most important factors ^[3-5].

Health professionals' job satisfaction and turnover are issues of international concern. Turnover of employees is a matter of concern for organizations. It has an impact on the organization, including loss of knowledge gained by the employee while on the job, understaffing, which in turn leads to decreased effectiveness and productivity of the remaining staff, and also organizations' costs relating to recruitment and selection, training of the new employee, personnel process, and induction ^[5,6].

In addition, high turnover is associated with a shortage of health professionals, and studies showed that health professionals' turnover is directly influenced by health professionals' job satisfaction. Thus, in health care organizations, it is very essential to determine factors associated with job dissatisfaction since this will ensure the provision of quality of care, as well as organizational efficiency and effectiveness. Additionally, job satisfaction ensures the sustainability of health care professionals in the health care systems ^[7,8].

In Sub-Saharan Africa (SSA), increased turnovers, inadequacy, retention, and the perpetual weakening quality of service delivery continue to frustrate health professionals, making it

difficult for the realization of the health indicators in these countries. And also, the lack of health workers has become the binding constraint in implementing many priority health programs in Africa ^[9,10].

The shortage of health professionals and job dissatisfaction is a worldwide phenomenon, including in Ethiopia ^[9]. In Ethiopia, several studies that focused on the identification of factors that affect health professionals' job satisfaction have been conducted and identified that the level of nurses' job satisfaction decreased from 2014 (59.6%) to 2019 (48%), and 64.9% had intention to leave the organization among nurses working in Ethiopian public hospitals ^[11,12].

However, job satisfaction can be varied from time to time and place to place; no study was done in the study area, and in the previous studies, variables like job safety and part-time job opportunity were not addressed. Therefore, this study was intended to describe the prevalence of job satisfaction and identify factors associated with job satisfaction of health professionals working in the public health facilities of the Dire Dawa administration.

2. Methods and Materials

2.1. Study Setting and Design

A facility-based cross-sectional study design was employed. A simple random sampling method was used to select 392 health professionals from 9 Dire Dawa public health facilities. Data was collected from May 15 to May 30, 2021.

2.2. Study Population

The study population included health professionals from Dire Dawa administration public health facilities. This survey included all health professionals working in Dire Dawa administration public health facilities who had a diploma or higher. The study eliminated health workers who were not permanent employees, had less than 6 months of work experience, or were about to leave the facility.

2.3. Sample Size Determination

Sample sizes were calculated for the first and second objectives.

For the first objective, the sample size was calculated using a single population proportion by considering the anticipated non-response rate of 5% at a 95% confidence level and a 5% margin of error. The proportion (p) of the overall job satisfaction level of health professionals is taken from the study conducted by Aklilu et al. ^[13] in Addis Ababa as $p = 0.538$. Thus, the sample size of this study can be given as:

$$n_0 = \frac{Z_{\alpha/2}^2 P \times (1-P)}{d^2} = n_0 = \frac{1.96^2 \times 0.538 \times (1-0.538)}{0.05^2} = 382$$

With including the possible non response rate of 5%, the sample size for this study was:
 $n=382+382 \times 0.05=401$, Therefore, the total sample size required for the study is 401.

For the second objective, sample size was determined based on factors associated with job satisfaction using the statistical Epi Info 7 Stat Calculator computer software program at 95% CI with $Z = 1.96$ and 80% power and a 5% nonresponsive rate. Finally, the sample size required for this study was determined by taking the maximum sample size. Therefore, the sample size calculated using a single population was the largest sample size (401) and was used as the final sample size of this study.

2.4. Data Collection Tool and Sampling Procedure

There are 2 hospitals and 15 health centers in the Dire Dawa Administration. Among the 15 health centers, 8 of them are located in the urban city of Dire Dawa. Out of those 5 urban and 3 rural located health centers and 1 hospital, they were selected by using simple random sampling techniques. The required number of respondents taken from each facility was allocated using the proportional-to-size allocation method. The level of satisfaction was measured by using a self-administered structured questionnaire adapted from the revisited Frederick Herzberg's motivation-hygiene theory and Weiss, Dawis, England, and Lofquist, which addressed factors of job satisfaction. Precautions were made to limit exposure to COVID-19 during data collocation. Prior to the actual data collection, a pretest was made on 5% of the total study-eligible subjects, and data collectors were trained.

2.5. Operational Definitions

Job satisfaction: defined as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences.” In order to label respondents as satisfied or dissatisfied, respondents were asked the Minnesota Satisfaction Questionnaire (MSQ), which contains sub-constructs for each respondent in a 5-point Likert scale (ranging from 1 to 5). Since each item had a 5-point Likert scale, the ranges were calculated by summing the answers to all items into two categories, satisfied and dissatisfied, by using the demarcation threshold from the formula $\{(\text{total highest score}-\text{total lowest score})/2\} + \text{total lowest score}$.

2.6. Data Processing and Analysis

Descriptive statistics like frequency and percentage were used to define respondents in relation to pertinent variables and presented using tables and charts. Variables that showed association

with the dependent variable in the bivariate analysis at $\alpha < 0.2$ are entered into the multivariable logistic regression model. Furthermore, adjusted odds ratios (OR) with corresponding 95% confidence intervals are estimated, and p-values less than 0.05 are used to identify variables that have a statistically significant association with health professionals' job satisfaction. The collected data was entered by using Epi Data version 3.1 and analyzed using SPSS version 25.

3. Results

3.1. Socio-Demographic Characteristics of the Study Participants

As per the sample size of this study, 401 questionnaires were distributed to respondents, and 392 questionnaires were filled and returned, making a response rate of 97.7%. Out of the total study respondents, 234 (59.7%) of the respondents were males. The mean and standard deviation of age were 31.88 and 5.995, respectively. The majority of respondents, 206 (52.6%), were aged less than 30 years, and 212 (51.5%) of them were nurses by profession (Table 1).

Table 1: Socio-demographic characteristics of participants for the study on Job satisfaction and among health professionals in Dire Dawa public health facilities 2021

Independent Variables	Category	Frequency	Percentage
Sex	Male	234	59.7
	Female	158	40.3
Age	<30 years	206	52.6
	30-40 years	161	41.1
	40-50 years	18	4.6
	above 50 years	7	1.8
Marital status	Single	138	35.2
	Married	211	53.8
	Divorced	36	9.2
	Other	7	1.8
Educational Level	Diploma	45	11.5
	Degree	344	87.8
	Master's Degree	3	.8
Work experience	Less than one year	11	2.8
	1-3 year	70	17.9
	3-5 year	89	22.7
	more than 5 years	222	56.6
Average monthly income	less than 5000	42	10.7
	5000-10000	281	71.7
	Above 10000	69	17.6

3.2. Level of Health Professionals Satisfaction by Motivational Hygienic Factor

A majority of respondents, 233 (59.4%) of them, replied that there was no fair motivation and encouragement for their good work, 55.4% of them indicated the absence of a culture of giving recognition for their good work, and 53.1% of them responded that their health center/hospital does not provide them regular training opportunities. Regarding relationships with supervisors and co-workers, the majority of respondents, 257 (65.6%), indicated that they have good working relationships with their supervisors/heads. Similarly, most respondents, 323 (82.4%), indicated that they have good working relationships with their co-workers (Table 2).

Table 2: Level of Health Professional satisfaction by Motivational Hygienic factor for the Job satisfaction and among health professionals in Dire Dawa public health facilities 2021

Variable	Response	Frequency	Percentage
Fair motivation and encouragement for your good work	Yes	159	40.6
	No	233	59.4
Culture of giving recognition for your good work	Yes	175	44.6
	No	217	55.4
The chances for career advancement on your job.	Very dissatisfied	43	11.0
	Dissatisfied	120	30.6
	Neutral	19	4.8
	Satisfied	161	41.1
	Very Satisfied	49	12.5
Hospital/ health center does provide regular training	Yes	184	46.9
	No	208	53.1
Good working relationships with your supervisor	Yes	257	65.6
	No	135	34.4
Good working relationships with your co-workers	Yes	323	82.4
	No	69	17.6
Do you think your job is safe/secured	Yes	172	43.9
	No	220	56.1
	Very low	68	17.3
How do you rate your workload	Low	77	19.6
	Fair	137	34.9
	High	75	19.1
	Very high	35	8.9
Part time work opportunity in this Hospital/ health center	Yes	206	52.6
	No	186	47.4

3.3. Magnitude of Job Satisfaction Among Health Professionals

Out of the total respondents, 214 (54.6%, 95%CI : (49.2%-59.7%)) of respondents indicated that they are satisfied with their current job (Figure 1).

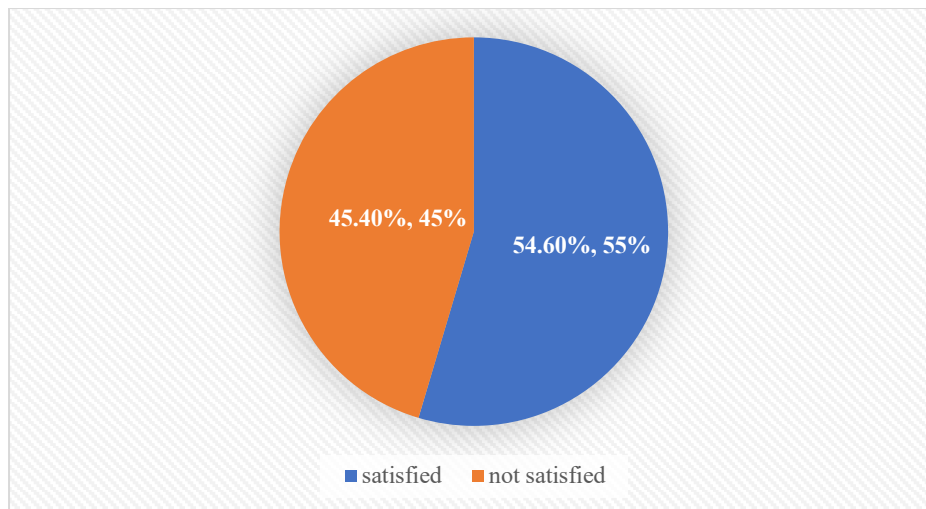


Figure 1: Overall job satisfaction of study participant in Dire Dawa public health facility

3.4. Factors Associated with Job Satisfaction

The results of the multivariate logistic regression model showed that the presence of motivation for good work, a chance for advancement, training opportunities, relations with supervisors/heads, relations with co-workers, and part-time opportunities were found to be significantly associated with job satisfaction at the 5% level of significance. Health care workers who felt the presence of motivation and encouragement for their good work were more likely to have job satisfaction than health care workers who didn't feel the presence of motivation and encouragement for their good work (AOR=2.191, 95% CI (1.166 - 4.117)).

Health care workers who are satisfied with the chance of career advancement on their job are more likely to have job satisfaction than health care workers who are not satisfied with the chance of career advancement on their job (AOR=2.477, 95% CI (1.396 - 4.396)). Health care workers who think their hospital/health center provides necessary training opportunities are more likely to have job satisfaction than health care workers who think their hospital/health center does not provide necessary training opportunities (AOR=1.990, 95% CI (1.127–3.514)).

Health care workers who have a good working relationship with their supervisor/head are more likely to be satisfied by their job as compared to health care workers who don't have a good working relationship with their supervisor/head (AOR=2.172, 95% CI (1.220–3.866)).

Health care workers who reported having a good working relationship with their co-workers are more likely to be satisfied by their job as compared to health care workers who reported not having a good working relationship with their co-workers (AOR=2.296, 95% CI (1.160 – 4.546)). In addition, part-time work opportunity is found to be significantly associated with job satisfaction. Health care workers who reported the presence of better part-time work opportunities in their hospital/health center are more likely to have job satisfaction than health care workers who reported a lack of better part-time work opportunities in their hospital/health center (AOR=2.083, 95% CI (1.110–3.909)) (Table 3).

Table 3: Factors associated with job satisfaction at bivariate and multivariate logistic regression analysis for the job satisfaction among health professionals in Dire Dawa public health facilities 2021.

Independent Variables	Job satisfaction		COR (95%CI)	AOR (95%CI)
	Satisfied	Not satisfied		
Fair motivation and encouragement for your good work				
Yes	125 (78.6)	34 (21.4)	5.94 (3.74 – 9.44) *	2.191 (1.166 - 4.117) *
No	89 (38.2)	144 (61.8)	1	1
Chances for advancement in your job.				
Satisfied	152 (72.4)	58 (27.6)	5.072 (3.29 – 7.80) *	2.477 (1.396 - 4.396) *
Dissatisfied or neutral	62 (34.1)	120 (65.9)	1	1
Hospital/ health center provides necessary training				
Yes	130 (70.7)	54 (29.3)	3.55 (2.33 – 5.41) *	1.990(1.127 – 3.514) *
No	84 (40.4)	124 (59.6)	1	1
Good working relationships with your supervisor				
Yes	175 (68.1)	82 (21.4)	5.25 (3.32 – 8.28) *	2.172(1.220 – 3.866) *
No	39 (28.9)	96 (71.1)	1	1
Good working relationships with your Co-workers				
Yes	197 (61.0)	126 (39.0)	4.78(2.64 – 8.64) *	2.296(1.160 - 4.546) *
No	17 (24.6)	52 (61.8)	1	1
Better par time opportunity				
Yes	149 (72.3)	57 (27.7)	4.86 (3.16 – 7.47) *	2.083(1.110 – 3.909) *
No	65 (34.9)	121 (65.1)	1	1
Working environment				
Satisfied	152(71.4)	61 (28.6)	4.70 (3.06-7.21) *	1.448 (0.808-2.597) *
Dissatisfied or neutral	62 (34.6)	117 (65.4)	1	1
Workload				
Fair or low	76 (39.4)	117 (60.6)	0.287 (0.189-0.43) *	1.420 (0.743-2.711)
High or very high	138 (69.3)	61 (30.7)	1	1
Culture of giving recognition for good work				
Yes	124 (78.6)	51 (21.4)	3.431 (2.24-5.23) *	0.709 (0.362-1.389)
No	90 (41.50)	127 (58.5)	1	1

4. Discussions

In this study, most of the respondents (54.6%) were satisfied with their job. This finding was almost consistent with a previous study done in Addis Ababa (53.8%) and the Federal Police Hospital (56.8%) [14,15]. However, the finding of this study was higher than the study done in West Shewa (46%) and Jimma (46%) [16,17] and was lower as compared to a study done in Punjab, which came up with 66%, Nigeria (90%), and Nepal (62.67%) [3,18,19]. The possible explanation for the above difference could be due to the difference in organizational setup and variation in the study setting and study period.

Health care workers who felt the presence of motivation and encouragement for their good work were 2.191 times more likely to be satisfied as compared to their counterparts. These results were consistent with the study done in the USA, Jimma, and Bahir Dar [12,16,21]. The finding of this study on relationships with supervisors and co-workers was consistent with a finding of a study conducted in Swiss, Gondar, Jimma, and Adama Hospitals in Ethiopia that showed having a good relationship increases the likelihood of job satisfaction [12,22-24].

This result may be due to the fact that good co-worker relationships create good communication and facilitate good working conditions and satisfaction in the job. This study revealed that health care workers who are satisfied with the chance of career advancement on their job are more likely to have job satisfaction than health care workers who are not satisfied with the chance of career advancement on their job (AOR=2.477, 95% CI (1.396 - 4.396)). This finding was consistent with the study done in Bahir Dar and Tanzania [21,25]. This study shows that healthcare workers who think their hospital/health center provides necessary training opportunities are more likely to have job satisfaction than healthcare workers who think their hospital/health center does not provide necessary training opportunities (AOR=1.990, 95% CI (1.127–3.514)).

This finding was in line with the study done at Addis Ababa, Jimma, and Rwanda [14,20,26]. This study has added a new predictor variable: part-time work opportunity is found to be significantly associated with job satisfaction. Health care workers who reported the presence of better part-time work opportunities in their hospital/health center are more likely to have job satisfaction than health care workers who reported a lack of better part-time work opportunities in their hospital/health center. Considering part-time work opportunities as an additional source of income for health care workers, the finding may suggest that a better opportunity to earn additional income results in better job satisfaction.

In general, this study's results were consistent with studies conducted in Ethiopia. Health professionals in Dire Dawa public health facilities are more similar to health professionals all over Ethiopia; their job satisfaction is affected by similar variables. The major difference among the countries seems to be the ranking of some variables over others, which may be dependent on cultural and organizational differences inherent in the different health care delivery systems.

5. Strength and Limitation of the Study

5.1. Strength of the Study

- The sample includes both the urban and rural facilities health professionals.
- An adequate sample was recruited
- The questionnaires were pre-tested and modified before data collection

5.2. Limitation of the Study

- Private health facilities were not included in the study

6. Conclusion

The results of this study discovered a modest level of job satisfaction among health professionals working in Dire Dawa's public health facilities. The Dire Dawa health bureau should improve the way it provides training to health professionals, as well as the structures and mechanisms that allow health professionals to advance in their careers. Management should consider providing educational opportunities to health professionals in exchange for long-term payment. Management must discover strategies to improve the interaction between health professionals and their supervisors/heads, as well as to motivate them.

Authors Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising, or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Availability of Data and Material

All the data of this study are available from the corresponding author upon request.

Competing interest

The authors declare that they have no conflicts of interest.

Ethical consideration

Ethical clearance was obtained from the Institutional Research Review Committee of the College of Medicine and Health Sciences of Dire Dawa University. Then an official letter of cooperation was obtained from the Dire Dawa Administration Health Bureau and submitted to the selected public health institution. Every information was collected anonymously, and confidentiality was assured throughout the study period.

Consent for publication

Not applicable.

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