

Research Article

# Assessment of Job Satisfaction and Associated Factors Among Health Professionals Working at Public Hospitals in Arsi Zone, Oromia Regional State, Ethiopia/2021

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## Abstract

**Background:** Job satisfaction encompasses the array of attitudes that employees hold towards their work. Various factors influence job satisfaction, including salaries, benefits, allowances, pension funds, working hours, and the level of respect received in the workplace. In Ethiopia, approximately 50% of nurses employed in public health facilities express dissatisfaction, citing reasons such as lack of motivation, inadequate salary, limited training opportunities, and insufficient human resources. **Objective:** This study aimed to evaluate job satisfaction and its determinants among health professionals working in public primary hospitals in Arsi Zone, Oromia Regional State, Ethiopia in 2021. **Methods:** An institutional-based cross-sectional study design was utilized, involving 207 health professionals selected systematically from public primary hospitals in Arsi Zone. Data were cleaned, coded, entered into EpiData 7, and analyzed using SPSS version 21. Multiple logistic regression analysis was conducted to identify statistically significant associations between dependent and independent variables and to predict factors influencing job satisfaction. **Results:** The study revealed that 71 (35.3%) health professionals expressed agreement that they would choose the same career if given the chance again. While 60 (29.9%) respondents perceived personal growth in their work, 124 (61.7%) did not experience any personal development. A majority of participants (78.1%) reported having adequate opportunities for professional growth, with 125 (62.1%) indicating satisfaction in their profession. Multivariate analysis identified age, work experience, and income as significant factors influencing job satisfaction among health professionals. **Conclusions and Recommendations:** The study found an overall low level of job satisfaction among health professionals. Age, work experience, and average monthly income emerged as key factors affecting job satisfaction in this group. The government should implement effective policies addressing all determinants of job satisfaction, improve payment structures, create conducive work environments, recognize achievements, and establish mechanisms for remote retention of staff. Hospital administrators should enhance work conditions, increase rewards, and prioritize the professional development of employees to boost staff job satisfaction.

## Keywords

Job Satisfaction, Health Professional, Hospital, Arsi

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## 1. Introduction

Job satisfaction is a crucial measure of an employee's contentment with their job [1]. High levels of job satisfaction can enhance staff enthusiasm, leading to improved organizational success and progress. It can also result in lower turnover rates and the delivery of high-quality services. Conversely, healthcare staff with low job satisfaction may experience medical issues themselves, impacting the overall stability of the healthcare workforce [2]. Dissatisfied employees are more likely to leave the organization, potentially leading to decreased service quality and damage to equipment due to counterproductive activities [3].

The World Health Organization (WHO) Global strategy on human resources for health workforce 2030 outlines a policy agenda aimed at ensuring a workforce capable of achieving the Sustainable Development Goals (SDGs) [4]. Motivating healthcare workers can encourage them to work towards organizational goals and maintain their efforts. Motivation is influenced by various factors, with job satisfaction being one of the key determinants [5].

The term job satisfaction refers to the attitude and feelings of people about their work. Positive and favorable attitudes towards the job indicate job satisfaction, while negative and unfavorable attitudes indicate job dissatisfaction [5]. A high level of job satisfaction has a positive effect on workers' health-related quality of life, job performance, retention in work, quality of healthcare delivery, and patient satisfaction [6]. Low job satisfaction may result in staff turnover, tiredness, absenteeism, undesirable job performance, and poor quality of service to clients [7, 8].

There are a number of interrelated factors that determine the level of job satisfaction of the health workforce. These factors include unsatisfactory working conditions characterized by heavy workloads, lack of professional autonomy, poor supervision, long working hours, unsafe workplaces, inadequate career structures, poor remuneration or unfair pay, poor access to needed supplies, and limited or no access to professional development opportunities. Additionally, internal and international migration of workers also play a role in determining the motivation of the health workforce [9].

Healthcare workers worldwide are currently encountering numerous challenges, including heightened public expectations, the demand for higher quality performance with limited resources, shortages of healthcare professionals in specific fields, and the underemployment of trained healthcare professionals [10-12]. The knowledge and skill requirements necessary to excel in their respective fields are evolving rapidly, necessitating ongoing learning and adaptation. Despite healthcare personnel remaining in the workforce for extended periods, the information they acquired during their education can quickly become outdated, presenting a challenge to both healthcare institutions and managers [13-15].

Nurses hold a crucial position in shaping the efficiency,

effectiveness, and sustainability of the healthcare system. Given that a significant portion of daily life is spent at work for most individuals, job satisfaction plays a vital role in determining overall quality of life [18]. Job satisfaction serves as an essential indicator of work-related quality of life [19], highlighting its significance as a primary outcome in health research. Professionals who are dissatisfied with their jobs can have a detrimental impact on the work environment, potentially leading to negative consequences [20].

The shortage of healthcare professionals in Ethiopia across various disciplines has significant implications for the efficiency and effectiveness of healthcare delivery services. Job dissatisfaction is identified as a major contributing factor to this shortage [15]. Health professionals are crucial human resources within healthcare organizations, playing a pivotal role in determining the quality of care provided and patient outcomes [16, 17].

Job satisfaction encompasses the attitudes that employees hold towards their jobs and workplaces. Factors such as salaries, benefits, allowances, pension funds, working hours, and the level of respect received in their roles can influence job satisfaction. Many human resource departments in organizations encounter challenges related to job satisfaction on a regular basis [21]. The absence of job satisfaction can lead to negative outcomes such as job stress, low morale, decreased productivity, high turnover rates, tardiness, and increased absenteeism [22].

The impact of job satisfaction on nurses is significant, as it affects not only individual well-being but also organizational and broader health and social outcomes. Research indicates that job dissatisfaction among hospital nurses is significantly higher than the average for other workers, with one in five hospital nurses planning to leave their current jobs within a year. Younger nurses, in particular, are more likely to consider leaving their jobs due to dissatisfaction. This trend of early departure from the nursing profession is concerning and underscores the importance of addressing factors contributing to job dissatisfaction [23].

Key factors associated with job satisfaction among nurses include competitive pay, adequate staffing levels, flexible scheduling, opportunities for growth and development, recognition, positive relationships with colleagues, a supportive work environment, meaningful work, effective supervision, and clear communication. Job satisfaction has been shown to impact various aspects such as productivity, performance, absenteeism, turnover rates, organizational citizenship behaviors, health and well-being, overall life satisfaction, and client satisfaction [24, 25].

In Ethiopia, a significant proportion of nurses working in public health facilities reported dissatisfaction with their jobs. Common reasons cited for this dissatisfaction include lack of motivation, inadequate salary, limited training opportunities, and insufficient human resources. Addressing these factors is crucial for improving retention rates among nurses and en-

hancing the quality of care provided in healthcare settings in Ethiopia [26].

A study conducted in 2017 on the assessment of attitude and factors affecting job satisfaction among nurses working in the emergency room of ALERT Hospital, Addis Ababa, revealed that 25.19% of nurses were satisfied with their income-related issues, while 74.81% were dissatisfied, 78.52% of nurses were satisfied with their working environment, while 21.48% were dissatisfied, 67.41% of nurses were satisfied with administrative matters in their hospitals, while 32.59% were dissatisfied. Out of 135 participants, 90 (66.67%) were dissatisfied with their jobs due to various reasons, while 45 (33.33%) were satisfied [27].

Another study conducted in 2020 on the level of nurses' job satisfaction and associated factors in public hospitals of Addis Ababa, Ethiopia, indicated that 64.8% of the respondents reported being dissatisfied with their jobs [28].

The Health Sector Transformation Plan (HSTP) of Ethiopia emphasizes equity in healthcare provision and ensuring the availability of quality healthcare for all as its primary agenda [29, 30]. However, achieving these goals requires committed, experienced, motivated, and stable healthcare providers. Therefore, this study aimed to assess job satisfaction and associated factors among health professionals working at public primary hospitals in Arsi Zone, Oromia Regional State, Ethiopia, in 2021.

## 2. Methods and Materials

### 2.1. Study Area and Period

This study was conducted in Arsi Zone, Oromia region, with Asella as the administrative center. The Zone is located in southeastern Ethiopia at an altitude ranging from 1500 to 4245 meters above sea level and is known as the crop belt of Ethiopia.

There are four primary hospitals in Arsi Zone, established between 2007 and 2009, with a total of 370 health professionals. The study was conducted from August to September 2021.

### 2.2. Study Design

An institutional-based cross-sectional study design was employed to assess job satisfaction and associated factors among health professionals in public primary hospitals of Arsi Zone, Oromia Regional State, Ethiopia, in 2021.

### 2.3. Population

#### 2.3.1. Source Population

All health professionals working in public primary hospitals of Arsi Zone, Oromia Regional State, Ethiopia, in 2021.

#### 2.3.2. Study Population

Selected categories of health professionals, including specialists, general practitioners, nurses, pharmacists, radiologists, medical technologists, public health officers, and hospital management, working in public primary hospitals of Arsi Zone, Oromia Regional State, Ethiopia, in 2021.

#### Exclusion criteria

Health care providers who are new to their roles, with less than half a year of experience at the time when data was collected.

### 2.4. Sample Size Determination

The sample size was determined using a single population proportion formula considering the following assumptions: proportion of job satisfaction was 54% [31], 5% level of significance ( $\alpha=0.05$ ) at 95% CI and margin of error between sample size and population parameter of 5%. The following formula was used to determine sample size:-

$$n = \frac{(Z_{\alpha/2})^2 P (1-p)}{d^2}$$

Where

N = the required sample size

$Z_{\alpha/2}$  = Critical value of  $z=1.96$

P = proportion of job satisfaction among health professionals = 54%

D=marginal error= (0.05).

$$= \frac{(1.96)^2 \times 0.54 \times 0.46}{(0.05)^2} = 382$$

Since the  $n < 10,000$  we used correction formula to get the final sample size

$$n = \frac{n}{1 + (n/N)} = \frac{382}{1 + (382/370)} = 188$$

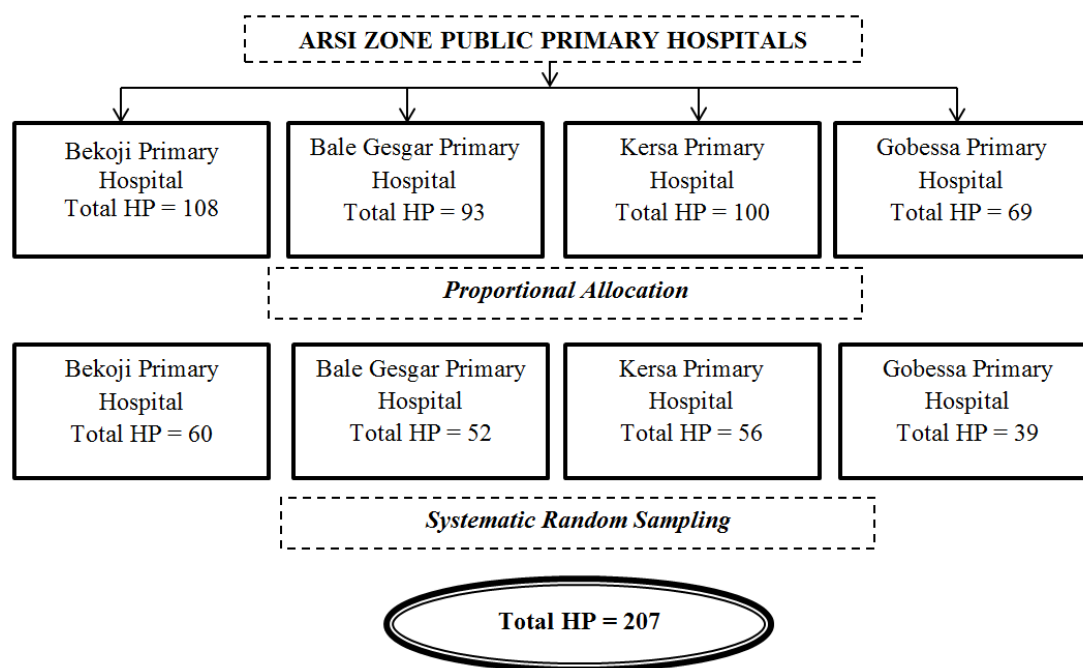
Adding 10% contingencies for non-response rate, then the final sample size was be207

Where n= sample size

N= Total health professionals in Arsi Zone public Primary Hospitals

### 2.5. Sampling Procedure and Technique

Arsi Zone has four public primary hospitals. Data from these hospitals indicate that there are 370 healthcare professionals working in them. To select study participants, we first allocated them proportionally to the sample size. Then, we used systematic random sampling to select participants from each primary hospital. (Figure 1).



**Figure 1.** Schematic presentation of sampling procedure, March 2020.

## 2.6. Variables

### 2.6.1. Dependent Variable

Job satisfaction

### 2.6.2. Independent Variables

- 1) Socio-demographic and economic factors: Age, sex, educational level, income, profession and year of experience
- 2) Organizational factors: Supervision, working condition, working group interaction, communication with others, job safety and healthy, working environment, opportunities of promotion and training and development
- 3) Other factors: Absenteeism, stress and reward system

## 2.7. Operational Definitions

**Job satisfaction:** The concept of job satisfaction has been defined in many ways. However, the most-used definition of job satisfaction in organizational research is that of Locke, who described job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" [32].

**Job satisfaction and individual determinants (personal characteristics):** Age, Marital status, Education, Income and Years of experiences.

**Organizational determinants or factors:** Supervision, Work group, Job content, Occupational level, Specialization, Age, Gender, Working condition, Opportunities of promotion, Employee morale and Reward system.

## 2.8. Data Collection Tools

### 2.8.1. Questionnaire

The questionnaire included both open-ended and closed-ended questions. The closed-ended questions were designed to measure factors related to employee job satisfaction and job dissatisfaction, such as supervision, work conditions, work relationships, communication, employee job safety and health, working environment, training and development, salary and benefits, and overall satisfaction.

The Minnesota Satisfaction Questionnaire (MSQ) short form was used as a reference for developing the closed-ended questions. The scales for these questions were as follows:

5: Strongly Agree, 4: Agree, 3: Neutral, 2: Disagree and 1: Strongly Disagree

Respondents were asked to rate their feelings of job satisfaction on this five-point rating scale.

To ensure that the questionnaire was appropriate for the study, the researcher modified questions from previous similar studies and the MSQ to capture the most relevant information.

### 2.8.2. Data Collection Procedures

Data collection was conducted by six trained BSc nurses, four of whom were data collectors and the remaining two were supervisors. After selecting respondents from the medical professional population, an orientation was provided for the selected data collectors. The trained data collectors then participated in data collection.

Questionnaires were distributed to the respondents by the researcher and the trained data collectors according to the sampling process. The questionnaires were collected back after ensuring that they were complete. The structured questionnaire was written in English. On average, it was expected to take 30 minutes to complete the questionnaire.

## 2.9. Data Quality Control

To ensure data quality, the principal investigator provided training to the data collectors. The questionnaire was pre-tested on 5% of the sample in another public primary hospital to assess its strengths and weaknesses.

During data collection, the supervisor checked the completed questionnaires daily for completeness and consistency of information. Any typing errors were manually edited. The supervisor also addressed any ambiguities or other problems encountered by the data collectors during the data collection period.

## 2.10. Data Processing and Analysis

The data was cleaned, coded, entered into EpiData 7, and exported to Statistical Package for Social Science (SPSS) version 21 for analysis. Frequency distributions were used to organize the data and present the responses obtained.

First, simple descriptive statistics (frequency distribution and percentages) were performed to describe the demographic, socioeconomic, and other health-related characteristics of the participants.

Measures of central tendency (mean and standard deviation) were calculated and utilized for appropriate variables to describe the data. Multiple logistic regression analysis was used to assess the presence of a statistical association between dependent and independent variables and to predict factors that affect the dependent variable.

Variables with a  $p$ -value  $\leq 0.2$  in bivariate analysis were considered candidates for multivariate analysis. In multivariate analysis, variables with a  $p$ -value  $\leq 0.05$  were considered significant.

The assumptions of normality for continuous independent variables were checked using visual observation (histogram). Multicollinearity between independent variables was checked using Pearson correlation coefficient. Variables with a correlation coefficient of 60% or above were entered into the final model one at a time.

Finally, the results were presented in writing, tables, and figures. They were compared with the results of other studies and discussed. Conclusions and recommendations were made based on the findings.

## 3. Ethical Considerations

Data collection was conducted after obtaining approval for the project proposal from the Arsi University Ethical Review

Committee. Permission to conduct the research in the proposed setting was also obtained from the Arsi Zone administrative office.

To ensure the participants' right to self-determination and privacy, they were informed about the study both verbally and in writing. The data collectors clearly informed participants that they had the right to decide voluntarily whether to participate in the study and the right to refuse participation. Voluntary consent was obtained after providing essential information about the study.

The participants' right to privacy was protected throughout the study. Data collection was carried out anonymously through face-to-face interviews with participants. The information gained during data collection was kept confidential.

## 4. Results

In this study, among the 207 health professionals sampled from public primary hospitals in Arsi Zone, 201 of them completed the questionnaire, resulting in a response rate of 97.1%.

### 4.1. Socio-Demographic and Economic Profile

In this study, the majority of health professionals (127, or 63.3%) were male, while the remaining 74 (36.8%) were female. The age of the study participants ranged from 20 to 50 years old, with a mean age of 35.4 (SD  $\pm 6.36$ ). In terms of religion, 76 (37.8%) of the study participants were Muslim, and 130 (64.7%) were Oromo by ethnicity.

Regarding marital status, the majority (162, or 80.6%) of the study participants were married. Among the sampled health professionals, 111 (55.2%) held a Bachelor of Science degree, and 78 (38.8%) were nurses by profession. The majority (69, or 34.4%) of health professionals had 5 to 10 years of experience, with a mean experience of 13.2 years (SD  $\pm 7.44$ ).

The study participants reported that 64 (81.6%) of them earned an average monthly income of 5,000 to 10,000 Ethiopian birr, with a mean average monthly income of 8,408.2 Ethiopian birr (SD  $\pm 1,516.9$ ). (Table 1).

**Table 1.** Socio-Demographic and Economic Profile of Health Professionals in Arsi Zone, Oromia Region, Ethiopia, September 2021.

Variables	Frequency (N=201)	Percentage
Sex		
Male	127	63.2
Female	74	36.8
Age		
19-24 Years	5	2.5
25-29 Years	38	18.9
30-34 Years	44	21.9

Variables	Frequency (N=201)	Percentage	Variables	Frequency (N=201)	Percentage
35-39 Years	60	29.9	Health officer	28	13.9
≥40 Years	54	26.8	Lab technician	16	8.0
Religion			Pharmacist	15	7.5
Muslim	76	37.8	Working Experience		
Orthodox Christian	70	34.8	<5 Years	27	13.4
Protestant	43	21.4	5-10 Years	69	34.4
Catholic	12	6.0	11-15 Years	41	20.4
Ethnicity			16-20 Years	32	15.9
Oromo	130	64.7	≥21 Years	32	15.9
Amhara	55	27.4	Average Monthly Income		
Gurage	16	8.0	5000 – 10,000 Birr	164	81.6
Marital Status			10,000 – 15,000 Birr	37	18.4
Single	34	16.9			
Married	162	80.6			
Divorced	3	1.5			
Widowed	2	1.0			
Educational Status					
Diploma	63	31.3			
Degree/ BSc	111	55.2			
MSc	9	4.5			
MPH	18	9.0			
Profession					
Nurse	78	38.8			
Midwife	45	22.4			
Doctor	19	9.5			

## 4.2. General Satisfaction Among Health Professionals

In this study, 71 (35.3%) of health professionals indicated that they would choose the same career again if given the choice. Among the study subjects, nearly two-thirds (127, or 63.2%) agreed or strongly agreed that their job had more advantages than disadvantages. Almost half (97, or 48.3%) of the health professionals did not believe that their income was not commensurate with the work they do.

Although 60 (29.9%) of the respondents believed that there was personal growth in their work, 124 (61.7%) did not experience any personal growth (in terms of salary, education, etc.). The results of this study indicate that 143 (71.1%) of the health professionals really enjoyed their work, and 139 (69.1%) had no intention of changing their career (indicating satisfaction with their work). (Table 2)

**Table 2.** General satisfaction among health professionals working at public primary hospitals in Arsi Zone, Oromi Region, Ethiopia, September 2021.

Variables	Strongly Disagree N (%)	Disagree N (%)	Neutral N (%)	Agree N (%)	Strongly Agree N (%)
I could choose the career again I would make the same decision	6 (3.0%)	44 (21.9%)	70 (34.8%)	70 (34.8%)	11 (5.5%)
My job has more advantages than disadvantage	12 (6.9%)	14 (7.0%)	74 (36.8%)	48 (23.9%)	53 (26.4%)
My income is a reflection of the work I do	16 (8.0%)	81 (40.3%)	48 (23.9%)	48 (23.9%)	8 (4.0%)
There is personal growth in my work	46 (22.9%)	78 (38.8%)	17 (8.5%)	52 (25.9%)	8 (4.0%)
I really enjoy my work	8 (4.0%)	37 (18.4%)	13 (6.5%)	80 (39.8%)	63 (31.3%)
In general I am satisfied with my work	8 (4.0%)	40 (19.9%)	14 (7.0%)	76 (37.8%)	63 (31.3%)

### 4.3. Opportunity to Develop Among Health Professionals

In this study, the majority of health professionals (157, or 78.1%) reported that they had sufficient opportunities to develop their work, and 125 (62.1%) indicated that they were satisfied with their profession. Among the respondents, 166 (82.6%) reported that they were mentally stimulated by their work.

The majority (126, or 62.6%) of health professionals strongly disagreed or disagreed that they had not experienced frustration in their work due to limited resources. In this study, the majority (154, or 76.6%) of health professionals strongly agreed or agreed that their work was not routine and non-stimulating. Among the study participants, 115 (57.2%) and 46 (22.9%) agreed or strongly agreed, respectively, that too much was expected of them at work. (Table 3)

**Table 3.** Opportunity to develop among health professionals working at public primary hospitals in Arsi Zone, Oromi Region, Ethiopia, September 2021.

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
I have sufficient opportunity to develop in my work	33 (16.4%)	11 (5.5%)	0	72 (35.8%)	85 (42.3%)
I am satisfied in my profession	26 (12.9%)	50 (24.9%)	0	104 (51.7%)	21 (10.4%)
My work is mentally stimulate	0	27 (13.4%)	8 (4.0%)	85 (42.3%)	81 (40.3%)
I haven't experienced frustration in my work due to limited resources	64 (31.8%)	62 (30.8%)	19 (9.5%)	49 (24.4%)	7 (3.5%)
My work is not routine and non-stimulating	3 (1.5%)	37 (18.4%)	7 (3.5%)	70 (34.8%)	84 (41.8%)
Too much is expected from me at work	0	16 (8.0%)	24 (11.9%)	115 (57.2%)	46 (22.9%)

### 4.4. Level of Responsibility Among Health Professionals

Among the study participants, 70 (34.8%) and 64 (31.8%) agreed or strongly agreed that they enjoyed their status in the community as healthcare professionals. In this study, 75 (37.3%) of health professionals received recognition for all tasks well done, and 122 (60.7%) of the respondents agreed that they were entrusted with great responsibility in their work. (Table 4).

**Table 4.** Level of responsibility among health professionals working at public primary hospitals in Arsi Zone, Oromia Region, Ethiopia, September 2021.

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
I enjoy my status in the community as a healthcare professional	0	9 (4.5%)	58 (28.9%)	70 (34.8%)	64 (31.8%)
I receive recognition for tasks well done	3 (1.5%)	18 (9.0%)	64 (31.8%)	75 (37.3%)	41 (20.4%)
I am entrusted with great responsibility in my work	5 (2.5%)	19 (9.5%)	34 (16.9%)	122 (60.7%)	21 (10.4%)

#### 4.5. Level of Patient Care and Time Pressure Among Health Professionals

In this study, 94 (46.8%) and 69 (34.3%) of healthcare professionals strongly agreed and agreed, respectively, that patients appreciate what they do for them. Among the respondents, 104 (51.7%) agreed and 57 (28.4%) strongly agreed that they have sufficient time for each patient. From the study subjects, 83 (41.3%) and 69 (34.3%) agreed and

strongly agreed, respectively, that their patients cooperate because they understand their working conditions.

In total, over half the participants (113, or 56.2%) agreed that they have to perform many non-clinical tasks. Views about freedom to decide how they do their work were fairly evenly spread, with 43.8% strongly agreeing and 39.8% agreeing that they spend time doing tasks that could be done by lower cadres. (Table 5).

**Table 5.** Level of Patient Care and Time pressure among health professionals working at public primary hospitals in Arsi Zone, Oromia Region, Ethiopia, September 2021.

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
The patients appreciate what I do for them	0	6 (3.0%)	32 (15.9%)	69 (34.3%)	94 (46.8%)
I have sufficient time for	0	5 (2.5%)	35 (17.4%)	104 (51.7%)	57 (28.4%)
My patients co-operate because they understand my working Conditions	0	14 (7.0%)	35 (17.4%)	83 (41.3%)	69 (34.3%)
There are not many non-clinical tasks that I have to do	0	19 (9.5%)	60 (29.9%)	113 (56.2%)	9 (4.5%)
I have enough freedom to decide how I do my work	0	23 (11.4%)	11 (5.5%)	79 (39.3%)	88 (43.8%)

#### 4.6. Level of Staff Relations Among Health Professionals

In this study, 122 (60.7%) of health professionals reported having a positive working relationship with their colleagues. Additionally, 112 (55.7%) of participants indicated a cooperative atmosphere between staff and management.

However, 83 (41.3%) of respondents strongly disagreed that clear channels of communication existed in their work-

place. Furthermore, 104 (51.7%) of healthcare professionals indicated that their managers did not express concern for their well-being.

Regarding decision-making, 71 (35.3%) of healthcare professionals strongly agreed that management actively involved staff in the process. Additionally, 69 (34.3%) agreed that they relied on their colleagues for support.

The majority of study participants, 159 (79.1%), reported satisfaction with the management style in their department. (Table 6).

**Table 6.** Level of staff relations among health professionals working at public primary hospitals in Arsi Zone, Oromia Region, Ethiopia, and September 2021.

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
I have a good working relationship with my colleagues	3 (1.5%)	15 (7.5%)	61 (30.3%)	63 (31.3%)	59 (29.4%)
There is an atmosphere of co-operation between staff & management	-	20 (10.0%)	69 (34.3%)	69 (34.3%)	43 (21.4%)
There is a clear channel of communication at my work-place	5 (2.5%)	28 (13.9%)	83 (41.3%)	76 (37.8%)	9 (4.5%)

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N (%)	N (%)	N (%)	N (%)	N (%)
My manager is concerned about my wellbeing	6 (3.0%)	40 (19.9%)	104 (51.7%)	45 (22.4%)	6 (3.0%)
Management does involve staff in decision making	-	70 (34.8%)	71 (35.3%)	51 (25.4%)	9 (4.5%)
I need my colleagues for support	-	15 (7.5%)	63 (31.3%)	69 (34.3%)	54 (26.9%)
I am happy with the management style in my department	3 (1.5%)	18 (9.0%)	86 (42.8%)	73 (36.3%)	21 (10.4%)

## 4.7. Bivariate and Multivariate Logistic Regression

### 4.7.1. Bivariate Logistic Regression

In this study, associations found to be significant in the bivariate analysis at  $P < 0.05$  were included in the multivariate

analysis to determine which factors best explain or predict job satisfaction among healthcare professionals.

During the bivariate analysis, the following factors were found to be statistically significant:

Sex of respondents ( $P < 0.054$ ), Age of respondents ( $P < 0.066$ ), Marital status ( $P < 0.000$ ), Educational status ( $P < 0.004$ ), Working experience ( $P < 0.000$ ) and Average monthly income ( $P < 0.076$ ) (Table 7).

**Table 7.** Bivariate logistic regression analysis of job satisfaction among healthcare professionals working at public primary hospitals in Arsi Zone, Oromia Region, Ethiopia, September 2021.

Variables	Job Satisfaction		Chi-square	P- Value	COR (95% CI)
	Satisfied (N=119)	Not satisfied (N=82)			
Sex					
Male	69 (34.3%)	58 (28.9%)	3.392	0.066*	1.845 (0.139 - 4.730)
Female	50 (24.9%)	24 (11.9%)			1
Age					
19-24	2 (1.0%)	3 (1.5%)	5.029	0.054*	2.917 (0.410 - 8.546)
25-29	28 (13.9%)	10 (5.0%)			0.818 (0.629 - 2.546)
30-34	23 (11.4%)	21 (10.4%)			1.16 (0.443 - 2.900)
35-39	35 (17.4%)	25 (12.4%)			0.641 (0.773 - 8.789)*
≥40	31 (15.4%)	23 (11.4%)			1
Marital status					
Single	18 (9.0%)	16 (8.0%)	6.528	0.000*	1
Married	99 (49.3%)	63 (31.3%)			4.500 (0.435 - 5.132)
Divorced	-	3 (1.5%)			4.595 (0.073 - 6.431)
Widowed	2 (1.0%)	-			2.330 (0.018 - 1.428)
Educational status					
Diploma	40 (19.9%)	23 (11.4%)	7.999	0.004*	0.561 (1.126 - 10.422)*
Degree (BSc)	60 (29.9%)	51 (25.4%)			1.195 (1.031 - 8.185)
MSc	9 (4.5%)	-			0.564 (0.107 - 3.455)

Variables	Job Satisfaction		Chi-square	P- Value	COR (95% CI)
	Satisfied (N=119)	Not satisfied (N=82)			
MPH	10 (5.0%)	8 (4.0%)			1
Profession					
Nurse	53 (26.4%)	25 (12.4%)			1
Midwifery	34 (16.9%)	11 (5.5%)			0.180 (0.09 – 0.390)
Doctor	11 (5.5%)	8 (4.0%)	28.219	0.329	4.447 (1.890 – 10.551)
Health officer	15 (7.5%)	13 (6.5%)			4.890 (2.730-8.871)
Lab technician	3 (1.5%)	13 (6.5%)			1.490 (0.334 – 6.678)
Pharmacist	3 (1.5%)	12 (6.0%)			19.98 (9.51 – 41.99)
Working experience					
<5	16 (8.0%)	11 (5.5%)			0.561 (1.126 – 10.422)*
5-10	38 (18.9%)	31 (15.4%)			1.195 (1.031 – 8.185)
11-15	22 (10.9%)	19 (9.5%)	2.763	0.000*	0.564 (0.107 – 8.185)
16-20	22 (10.9%)	10 (5.0%)			2.330 (0.162 – 2.566)
≥21	21 (10.4%)	11 (5.5%)			1
Average monthly income					
5000-10,000	100 (49.8%)	64 (31.8%)			1
10,001-15,000	19 (9.5%)	18 (9.0%)	1.158	0.076*	10.64 (3.42 – 33.9)

#### 4.7.2. Multivariate Logistic Regression

In the multivariate logistic regression analysis, only age, working experience, and income of health professionals were found to be statistically significant at  $P < 0.05$ .

In this study, health professionals between the ages of 35-39 years were nearly three times (AOR = 2.963; 95% CI: 0.457-1.382) more likely to be satisfied with their job compared to those professionals aged 40 years or older.

Healthcare professionals with less than 5 years of working experience were slightly over nine times (AOR = 9.312; 95% CI: 0.445-8.785) more likely to be satisfied with their job compared to those with 21 or more years of experience.

Furthermore, healthcare professionals earning an average monthly income of 10,001-15,000 birr were approximately 1.676 times (AOR = 1.676; 95% CI: 0.330-1.384) more likely to be satisfied with their job compared to those earning 5,000-10,000 birr. (Table 8).

**Table 8.** Multivariate logistic regression analysis of job satisfaction among healthcare professionals working at public primary hospitals in Arsi Zone, Oromia Region, Ethiopia, September 2021.

Variables	Job Satisfaction		AOR (95%CI)
	Satisfied (N=119)	Not satisfied (N=82)	
Sex			
Male	69 (34.3%)	58 (28.9%)	1.75 (0.962-3.188)
Female	50 (24.9%)	23 (11.9%)	1
Age			
19-24	2 (1.0%)	3 (1.5%)	2.022 (0.312-13.101)

Variables	Job Satisfaction		AOR (95%CI)
	Satisfied (N=119)	Not satisfied (N=82)	
25-29	28 (13.9%)	10 (5.0%)	0.455 (0.195-1.185)
30-34	23 (11.4%)	21 (10.4%)	1.231 (0.553-2.740)
35-39	35 (17.4%)	25 (12.4%)	2.963 (0.457-1.382)*
≥40	31 (15.4%)	23 (11.4%)	1
Marital status			
Single	18 (9.0%)	16 (8.0%)	1
Married	99 (49.3%)	63 (31.3%)	1.492 (1.103-4.185)
Divorced	-	3 (1.5%)	1.874 (0.852-2.140)
Widowed	2 (1.0%)	-	3.011 (1.332-5.604)
Experience			
<5	16 (8.0%)	11 (5.5%)	9.312 (0.455-8.785)*
5-10	38 (18.9%)	31 (15.4%)	1.557 (0.652-3.718)
11-15	22 (10.9%)	19 (9.5%)	1.649 (0.635-4.278)
16-20	22 (10.9%)	10 (5.0%)	0.868 (0.305-2.466)
≥21	21 (10.4%)	11 (5.5%)	1
Income			
5000-10,000	100 (49.8%)	64 (31.8%)	1
10,001-15,000	19 (9.5%)	18 (9.0%)	1.676 (0.330-1.384)*

## 5. Discussions

This study aimed to assess the level of job satisfaction among healthcare professionals. The results indicated that a majority of them, 30.9%, expressed dissatisfaction with their work. This finding is consistent with a study conducted in Gauteng, where 35% of nurses reported dissatisfaction [10]. However, it is lower than the dissatisfaction level found in a study conducted at Jimma University Specialized Hospital, where the dissatisfaction level among nurses was approximately 50% [11]. This difference in findings could be attributed to variations in infrastructure and sample size.

Job satisfaction refers to the degree of favorableness with which employees view their work. It is a critical issue that affects the lives of all workers, including nurses, and plays a significant role in determining whether an employee will remain in a position or seek employment elsewhere. Moreover, job satisfaction can influence the quality of work produced [12]. In this study, 30.9% of the participants expressed dissatisfaction with their job, which is lower than the findings of a previous study conducted in Ethiopia [18]. The major reasons reported for this dissatisfaction included lack of mo-

tivation, limited promotion opportunities, insufficient resources and supplies, poor infrastructure, inadequate participation and interaction with team members and supervisors, and inadequate staffing.

In this study, a total of 71 (35.3%) health professionals indicated that they would choose the same career if given the chance to choose again. Moreover, almost two-thirds (127; 63.2%) of the study subjects agreed or strongly agreed that their job had more advantages than disadvantages. Additionally, nearly half (97; 48.3%) of the health professionals did not believe that their income was not reflective of the job they do. The level of general satisfaction among health professionals was reported to be 139 (69.1%).

The findings of this study were lower than those reported in studies conducted in Tanzania [22] and Ghana [15], but similar to the findings in Sidama Zone and East Gojjam [25, 23]. The disparity in results could be attributed to variations in the study period and the methodologies employed.

In this study, the majority of health professionals, 157 (78.1%), reported having sufficient opportunities to develop their work. Additionally, 125 (62.1%) participants indicated satisfaction in their profession. Among the respondents, 166 (82.6%) reported being mentally stimulated by their work. Moreover, a majority of 126 (62.6%) health professionals

strongly disagreed or disagreed that they experienced frustration in their work due to limited resources.

Furthermore, in this study, the majority of 154 (76.6%) health professionals strongly agreed or agreed that their work is not routine and non-stimulating. Among the study participants, 115 (57.2%) agreed and 46 (22.9%) strongly agreed that too much is expected from them at work. Overall, 137 (68.2%) health professionals expressed satisfaction with their level of opportunity to develop.

The findings of this study were higher than those reported in studies conducted in Sidama Zone [24] and Jimma [26]. The difference in results could be attributed to variations in sample size and study period.

The present study found a strong relationship between job satisfaction and socio-demographic characteristics, including age, working experience, and salary. These findings are in line with previous research done in health facilities in Pakistan and Turkey [27, 28]. However, age had no effect on work satisfaction in a Malaysian research on human resources personnel; instead, education level did [29]. Hence, prior research is conflicting and ambiguous, maybe as a result of cultural variations and the types of employees that were the subject of the studies.

Work experience and job satisfaction of nurses were interlinked to each other. The more work experience a healthcare professional reported, the less satisfied they were with their job [12]. Healthcare professionals with less than five years of experience were slightly more than nine times more likely to be satisfied with their job than those with more than twenty-one years of experience [13]. Good access to educational opportunities and a reduction in workload would also make nurses happier in their jobs.

## 6. Conclusions

According to this study, health professionals working at public primary hospitals had poorer overall job satisfaction. Health professionals' job happiness was highly correlated with age, work experience, and average monthly pay.

## Abbreviations

BSc	Bachelors of Science
CI	Confidence Interval
ETB	Ethiopian Birr
HP	Health Professionals
HSTP	Health Sector Transformation Plan
SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Science
WHO	World Health Organization

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## Ethics Approval and Consent to Participate

This research was approved by Institutional Review Board of Arsi University College of Health Sciences.

## Author Contributions

**Ashim Gebi:** Conceptualization, Methodology, Investigation, Data curation

**Melese Tadesse Aredo:** Conceptualization, Methodology, Formal Analysis, Data curation

**Dejene Seyoum Gebre:** Methodology, Writing – review & editing

**Solomon Tejineh:** Writing – original draft, Conceptualization, Formal Analysis, Methodology, Writing – review & editing

**Getu Teshome:** Formal Analysis, Methodology, Writing – review & editing

**Dida Batu:** Methodology, Writing – review & editing

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## Data Availability Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

## Conflicts of Interest

The authors declare no conflicts of interest.

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