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 job indicate job dissatisfaction [1].

The phenomenon of job satisfaction and dissatisfaction is the function of two needs systems of physiological and psychological. Physiological needs are called extrinsic or hygiene factors which includes: payment, supervision, fringe benefits, operating procedures, coworkers, and communication. Psychological needs are called intrinsic or motivator factors which includes: nature of work, promotion and contingent rewards. The motivation factors come from the nature of the job itself, not from external rewards or job conditions which can lead to satisfaction but their absence can lead only to lack of satisfaction and not dissatisfaction. The hygiene factors are related to the work environment which are external to employees and are controlled by another person rather than the person himself which can lead to dissatisfaction and at best they can produce only lack of dissatisfaction rather than satisfaction [2].

Job satisfaction causes a series of influences on various aspects of organizational life such as the influence of job satisfaction on employee performance, loyalty and absenteeism. For example satisfaction of workers leads to departmental and organizational level improvements, the higher the degree of job satisfaction the higher is the level of employee loyalty and vice versa and when satisfaction is high, absenteeism tends to be low; when satisfaction is low, absenteeism tends to be high [1].

The low job satisfaction among nurses results negative outcome that affect both quality and cost of patient care. Even though the cost of nurse job dissatisfaction has not been directly measured, the high cost of turnover rate has been well established. Moreover, poor patient outcomes increase the length of stay, increase resource utilization and increase the cost of treatment. Nurses who were not satisfied at work were also found to distance themselves from their patients and their nursing chores [3]. With this regard a descriptive cross-sectional study done in Ekiti State, Nigeria showed that majority (67.1%) of the nurses had low degree of job satisfaction while only few nurses (3.1%) reported high degree of satisfaction with job. A significant positive correlation was found between overall work environment and the general job satisfaction of the nurse [4]. Another study done among hospital nurses in Kampala, Uganda showed that only 17.4% nurses reported satisfaction with their job [5]. Furthermore study done

Abstract

**Background:** Job satisfaction represents one of the most complex areas facing today’s managers when it comes to managing their employees. The low job satisfaction among nurses results negative outcome that affect both quality and cost of patient care. Dissatisfaction not only gives poor quality, but also less efficient care.

**Objective:** To assess the level of job satisfaction and associated factors among nurses in East Gojjam Zone Public hospitals northwest Ethiopia 2016.

**Method:** Institutional based Cross-sectional study design was employed. Sampling method was simple random sampling and data was collected from March 8 to 23, 2016. Source population of the study were all nurses who work at public hospitals in East Gojjam zone public hospitals and sample size was 181 nurses from the four hospitals. After nurses were proportionally allocated to size from the four hospitals. Data were collected through pretested self-administered structured questionnaire. Both descriptive and inferential statistics were used to present the data

**Results:** A total of 178 nurses were voluntarily agreed to participate in the study with a response rate of 98.3%. Overall average prevalence rate of job satisfaction of this study was 54.2%. The most highly satisfied subscale for study participants was nature of work and the most dissatisfied sub scale was promotion. There was a significance mean difference of job satisfaction between age groups, between sex of respondents and between nurses who had children and nurses who had no children.

**Conclusion:** The average job satisfaction of nurses was at moderate level.

**Keywords:** Job satisfaction; East Gojjam; Nurses
in Public Hospitals in Ethiopia Tigray region, almost half of Nurses were dissatisfied with their job [6].

There are two approaches to the study of job satisfaction the global approach and the facet approach. The global approach treats job satisfaction as a single, overall feeling toward the job. The facet approach focuses on job facets or different aspects of the job. The facet approach permits a more complete picture of job satisfaction. An individual typically has different levels of satisfaction with the various facets [2]. Therefore this study was done based on the facet approach.

The results of this study might be used to guide policy makers and nurse managers to develop a strategy to increase job satisfaction among nurses in hospital setting. Because when job satisfaction nurses improved, then nursing care of the patients might be increased and it might reduce costs for the healthcare organizations as well as individual patients.

Methods

Study design and sampling procedure

Institutional based cross-sectional study design was employed. The study was conducted in East Gojjam Zone Public Hospitals. In East Gojjam Zone there were 4 hospitals with a total of 284 nurses during this study. By simple random sampling 181 nurses were included in the study as the study participant.

Measurement tool

A structured self-administered questionnaire was used to collect data from study participants. Job satisfaction of the nurses was assessed with the Job Satisfaction Survey (JSS). The JSS instrument is a 36 item, nine facet scale with each 4 item of self-report instrument which provides an overall job satisfaction score after assessing nine facets. The sub scales are: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work and communication. The respondents agree or disagree on a 6-point lier-scale of: (1) very much disagreement, (2) disagree moderately, (3) disagree slightly, (4) agree slightly, (5) agree moderately, and (6) agree very much. Some items are scored positively while others are scored negatively. Therefore reverse scoring has been made before total summation of the score. The total satisfaction score of the 36 items ranging from 36-216. Therefore scores with a mean item response of 4 or more represents satisfaction, whereas mean responses of 3 or less represents dissatisfaction. Mean scores between 3 and 4 are ambivalent. These scores were then transformed to for 36-216 score. Score of 36-108,109-143 and 144-216 was considered as dissatisfied, ambivalent and satisfied respectively with their jobs. Reliability of the instrument was established with an overall Cronbach’s alpha score of 0.91 [7].

Ethical clearance

Ethical clearance and approval to conduct this research was obtained from research and ethical review board of department of nursing and midwifery, school of allied health science, college of Health science, Addis Ababa University. After thoroughly discussing, the ultimate purpose and method of the study, permission was sought from the study hospitals. The study participants were informed about the objective and expected outcomes of the study and written consent was provided for guaranteeing their choice of participation or refusal.

All the information was recorded anonymously and confidentiality was assured throughout the study.

Data processing and analysis

The collected data were coded and entered into Epi data version 3.1. Then the cleaned data were exported to SPSS version 23.00. Recoding and reverse coding was done for negative statements. Data analysis was done using descriptive and inferential statistics. Statistical analyses were performed with the use of Independent-Samples T Test, One Way ANOVA and Pearson correlation.

Results

Socio demographic and work characteristics of respondents

A total of 181 eligible nurses were included in the study. Among this, about 178 nurses were voluntarily agreed to participate in this study, only 2 were not returned the questionnaires. This resulted in a response rate of 98.3%.

Out of 178 respondents, 102 (57.3%) were males. Moreover, the age of the participants included in this study ranged between 21 and 54 years with mean age of 28.77 (SD=±5.816) years. In addition 90 (50.6%) were married and 65 (36.5%) had children.

Half percent of the participants were nurses with less than or equal to 4 years of work experience. Nearly all participants (93.3%) reported working eight hours standard shift on a typical day. Most of the participants had been working in inpatient departments. From all participants only 28 (15.7%) participants had extra responsibility on the wards/units (Table 1).

| Variables                | Category        | Frequency | Percentage |
|--------------------------|-----------------|-----------|------------|
| Sex                      | Male            | 102       | 57.3       |
|                          | Female          | 76        | 42.7       |
| Age                      | <25 years       | 50        | 28.1       |
|                          | 26-30 years     | 92        | 51.7       |
|                          | >30 years       | 36        | 20.2       |
| Marital status           | Single          | 88        | 49.4       |
|                          | Married         | 90        | 50.6       |
| Level of education       | Diploma         | 81        | 45.5       |
|                          | Bachelor        | 97        | 54.5       |
| Work experience          | <5 years        | 89        | 50         |
|                          | 5-10 years      | 69        | 38.8       |
|                          | >10 years       | 20        | 11.2       |
| Work unit                | Inpatient       | 132       | 74.2       |
|                          | Outpatient      | 46        | 25.8       |
| Extra responsibility     | Yes             | 28        | 15.7       |
|                          | No              | 150       | 84.3       |
Table 1: Socio demographic and work characteristics of nurses in East Gojjam Zone public hospitals, Ethiopia, June, 2016 (n=178).

| Working hours/day | 8 h  | >8 h | Overall average |
|-------------------|------|------|-----------------|
|                   | 166  | 12   | 166             |
|                   | 93.3 | 6.7  | 93.3            |

Job satisfaction among nurses

From the descriptive analysis of JSS, respondents reported low satisfaction for payment, promotion, fringe benefits, contingent rewards and operating conditions subscales. The most dissatisfied subscale was promotion. Study participants were reported moderate satisfaction for supervision. However study participants were highly satisfied for relationship with co-workers, nature of work and communication. The most highly satisfied subscale for study participants was nature of work. In general the mean satisfaction level for all nurses 54.5 % (Table 2). Therefor the average job satisfaction of nurses in east Gojjam zone public hospital was at a moderate level of satisfaction.

Table 2: Subscales with overall average mean, SD and satisfaction level of nurses at East Gojjam Zone public Hospitals, 2016.

| Subscales                  | Mean (SD)   | SD  | Average satisfaction (%) |
|----------------------------|-------------|-----|----------------------------|
| Payment                    | 2.51 (1.12) | 41.8|
| Promotion                  | 2.18 (1.24) | 36.3|
| Supervision                | 3.78 (1.38) | 63.0|
| Fringe Benefits            | 2.40 (1.10) | 40.0|
| Contingent Rewards         | 2.63 (1.29) | 43.8|
| Operating Conditions       | 2.83 (0.76) | 47.2|
| Relationship with Co-workers| 4.52 (1.02) | 75.3|
| Nature of Work             | 4.54 (1.38) | 75.7|
| Communication              | 4.03 (1.62) | 67.2|

Figure 1: Level of job satisfaction among nurses in East Gojjam Zone public hospitals, 2016.

According to Spector JSS, score of 36-108,109-143 and 144-216 was considered as dissatisfied, ambivalent and satisfied respectively with their jobs. Accordingly majority of respondents 104 (58.4%) were ambivalent, 56 (31.5%) were dissatisfied and 18 (10.1%) of participants were satisfied (Figure 1).

Factors associated with job satisfaction

From the independent sample t-test there was significantly difference mean score of job satisfaction between males and females of respondents. In the same way, there was a significantly difference mean score of job satisfaction between nurses who had children and had no children at p<0.05 (Table 3).

Table 3: Variables associated with job satisfaction among nurses in East Gojjam Zone public hospitals, 2016.

| Variables              | Job satisfaction | Mean difference | t     | 95% C.I             |
|------------------------|------------------|-----------------|-------|---------------------|
|                        | Mean (SD)        |                 |       | Lower               |
|                        |                  |                 |       | Upper               |
| *Sex                   |                  |                 |       |                     |
| Male                   | 3.18 (0.64)      | -0.2            | -2.196| -0.37 -0.02         |
| Female                 | 3.38 (0.52)      |                 |       |                     |
| Marital status         |                  |                 |       |                     |
| Single                 | 3.20 (0.56)      | -0.14           | -1.566| -0.32 0.04          |
| Married                | 3.34 (0.63)      |                 |       |                     |
| *Having child          |                  |                 |       |                     |
| Yes                    | 3.39 (0.51)      | 0.2             | 2.195 | 0.02 0.38           |
| No                     | 3.19 (0.63)      |                 |       |                     |
| Level of education     |                  |                 |       |                     |
| Diploma                | 3.28 (0.55)      | 0.03            | 0.314 | -0.15 0.21          |
| Bachelor               | 3.25 (0.63)      |                 |       |                     |
| Extra responsibility   |                  |                 |       |                     |
| Yes                    | 3.42 (0.50)      | 0.18            | 1.52  | -0.06 0.43          |
| No                     | 3.24 (0.61)      |                 |       |                     |
| Working hours/day      | 8 h              | -0.03           | -0.183| -0.38 0.32          |
One way ANOVA was performed to see the relation of job satisfaction with age and work experience. But only age of the respondents was significant at $P<0.05$ where at least one group means differs from other group means [$F(2,175)=3.476$, $p=0.033$]. Then turkey post-hoc testing was carried out to identify the group mean difference in the specific age groups. Accordingly the mean satisfaction level of greater than 30 years old nurses ($mean=3.45$, $SD=0.49$) was higher than the mean satisfaction level of 26-30 years of nurses ($mean=3.16$, $SD=0.56$) and significantly associated at $p=0.036$ with a mean difference $-0.29$ and 95% confidence interval of $-0.56$ to $-0.2$. However there was no statistically significant mean difference between less than or equal 25 years nurses and 26-30 years or between less than or equal 25 years nurses and greater than 30 years old nurses (Table 4).

### Table 4: One way ANOVA between age groups and work experience of nurses at East Gojjam Zone public hospitals, Ethiopia 2016.

| Variables      | Mean (SD)  |
|----------------|------------|
| <25 years      | 3.33 (0.69) |
| 26-30 years    | 3.16 (0.56) |
| >30 years      | 3.45 (0.49) |
| <5 years       | 3.25 (0.63) |
| 6-10 years     | 3.23 (0.56) |
| >10 years      | 3.49 (0.58) |

The Pearson correlation coefficient ($r$) was tested to examine the relationships between overall job satisfaction score and nine job satisfaction dimension. Overall job satisfaction was significantly and positively correlated with each dimension. Strong correlation was seen between Promotion and total job satisfaction with correlation coefficient ($r=0.625$) at $p=0.01$. All other dimensions were moderately correlated with total job satisfaction score (Table 5).

### Table 5: Pearson correlations between general job satisfaction of nurses and dimensions of job satisfaction in East Gojjam Zone public hospitals June, 2016, **Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed), 1: Overall job satisfaction, 2: Payment, 3: Promotion, 4: Supervision, 5: Fringe benefits, 6: Contingent rewards, 7: Operating conditions, 8: Co-workers, 9: Nature of work, 10: Communication.

| S. No. | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1      | 1       |         |         |         |         |         |         |         |         |         |
| 2      | 0.488** | 1       |         |         |         |         |         |         |         |         |
| 3      | 0.625** | 0.538** | 1       |         |         |         |         |         |         |         |
| 4      | 0.462** | -0.123  | 0.12    | 1       |         |         |         |         |         |         |
| 5      | 0.575** | 0.340** | 0.485** | 0.126   | 1       |         |         |         |         |         |
| 6      | 0.543** | 0.375** | 0.319** | 0.025   | 0.320** | 1       |         |         |         |         |
| 7      | 0.300** | 0.172*  | 0.257** | -0.091  | 0.073   | 0.279** | 1       |         |         |         |
| 8      | 0.328** | 0.081   | 0.014   | 0.076   | -0.005  | 0.061   | -0.03   | 1       |         |         |
| 9      | 0.406** | 0.049   | 0.023   | 0.104   | 0.037   | 0.012   | -0.076  | 0.180*  | 1       |         |
| 10     | 0.592** | -0.086  | 0.101   | 0.473** | 0.197** | 0.083   | 0.098   | 0.143   | 0.243** | 1       |

### Discussion

This cross-sectional study revealed that the overall average prevalence rate of job satisfaction of this study was at moderate level (54.2%) which was slightly consistent compared with study done in Turkey with mean satisfaction level of nurses (58%) [8], in Slovenian hospitals job satisfaction of nurses was at a medium level [9], in Jordan with mean satisfaction level of nurses (57%) [10] and study done in Jordanian and Saudi nurses [11] with mean satisfaction of nurses was moderate level. The possible explanation for slight difference could be due socio economic and organizational difference. And when it was compared with study done Sidama zone public health facilities, south Ethiopia with overall job satisfaction of nurses (52.5%) [12], the
current study is slightly high. This minimal difference could be due to study time and the tool used difference.

In this study age of the respondents was significantly associated with job satisfaction. The mean satisfaction level of greater than 30 years old nurses (mean=3.45) was higher than the mean satisfaction level of 26-30 years of nurses (mean=3.16) and significantly associated at p=0.036. Even though the means plot didn't show increasing job satisfaction with increasing age group, older nurses showed more satisfied. This finding was consistent with study in Tigray region [6], where Nurses with older age were more satisfied than nurses with younger age group. This might be older nurse had no other option of jobs so that they were forced to like and satisfied with their current job. However this finding was inconsistent with study in Uganda [5] where younger nurses were more satisfied than older nurses.

The average mean scores for job satisfaction for males was 3.18, SD=0.64 and for females 3.38, SD=0.52. Thus, female's ratings of job satisfaction were significantly higher than male nurses at (t=2.196, p=0.03). This was consistent with a study in Turkey [8], where female nurses slightly more satisfied than male nurses. The possible explanation might be nursing still perceived to be a job for females rather than males. However this finding contradicted when compared with study in Uganda [5], where no significance difference was seen between female and male.

Nurses who had children, ratings of job satisfaction (mean=3.40, SD=0.51) were significantly higher than nurses had no children (mean=3.20, SD=0.63) at (t=2.2, p=0.03). Having child might be increase personal responsibility which intern due to the person to like his or her job.

Level of nursing education was not statistically significant in job satisfaction levels. This finding was contradicted with the finding in Uganda [5], where enrolled nurses were more satisfied than registered nurses and in Slovenian hospitals Nurses with a higher education were more satisfied with the job than with lower education [9]. The possible explanation might be in this study area, there was no clear cut job description based on level of nursing education. But this study was consistent with study done in India [3], where no significant association was found between satisfaction and educational level. There was a positive significant correlation between subscales of JSS with total job satisfaction. This was consistent with a study in Cross River State Nigeria and Turkey [8,13], where positive and significant correlation was seen.

Respondents were dissatisfied for payment, promotion, fringe benefit, contingent rewards, and operating conditions. However they were highly satisfied for relationship with co-workers, nature of work and communication and this result was consistent with study done in Jordan and Turkey [8,10]. But this result was inconsistent related with communication with study done in Saudi Arabia [14], where respondents lowest level of satisfaction regarding the communication inside the organization. From the nine sub scales nature of work was got the highest mean satisfaction score and this result was congruent with study in Saudi Arabia and Philippines [15,16]. This might be, even though average satisfaction level of nurse was moderate level still study participants like their profession.

Conclusion

Averagely, nurses were neither satisfied nor dissatisfied with their jobs, i.e., moderate level of satisfaction. The sub scales in which, nurses indicated satisfaction were nature of work, relationship with co-workers and communication. However the sources of dissatisfaction were promotion, fringe benefits, payment, contingent rewards and operating conditions. Individual factors like age, sex and nurses who had child were significantly associated with total job satisfaction score. All the sub scale were positively and significantly correlation with overall job satisfaction among nurses.

Recommendation

Based on the findings of the study the following were recommended:

- The Amhara Regional Health Bureau should give great concern on nurses’ job satisfaction by reviewing financial and non-financial benefit packages to increase job satisfaction among nurses in hospital setting.
- The study hospital manager should balance the benefit package and internal promotion to increase job satisfaction. The hospital managers should give emphasis for conducive environment for work, appropriate rewards and recognition for achievements among nurses.
- More studies should be conducted on a larger scale especially in a nationwide to identify factors that enhance job satisfaction for the hospital based nurses.

Disclosure

We declare that we do not have any conflict of interests.

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