

Job Satisfaction and Associated Factors Among Anesthetists at Government Hospitals of Addis Ababa, Ethiopia

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Abstract

Background: Anesthetic practice is always at high risk in medical profession. Job satisfaction level of Anesthetist can be affected by different factors. An investigation to retain anesthetists in the profession to meet the increasing demands of the healthcare system has a great importance. This study was aimed to determine the level of job satisfaction and associated factors among anesthetists working in government hospitals of Addis Ababa.

Methods: A cross-sectional study conducted on sampled 101 anesthetists. Simple random sampling method was used to obtain the study participants. Data were collected using a structured questionnaire, comprised two main parts; demography and job satisfaction. Respondent rated 18 factors related to job satisfaction using six point Likert scale. A descriptive analysis using Proportion and frequency were used. A 'chi square' test were used to assess statistical significance of association and *P*-values less than 0.05 were considered as statistically significant.

Results: Among 101 anesthetists respondent, 57% were male, the majority of respondents were below the age of 30 years 58.4% and 59.4% of the respondents were single. A 53% of the respondents were satisfied and the highest dissatisfaction rate was in the age group of below thirty. Satisfaction in helping others, responsibilities and freedom to choose method of working were significantly associated with job satisfaction. The major reasons reported for their dissatisfaction were inadequate salary, lack of public awareness about the role of anesthetists and professional hazard.

Conclusion: There is a low level of job satisfaction among anesthetists who are working in government hospitals of Addis Ababa. Therefore, improving satisfaction level of anesthetist by solving major reasons of dissatisfaction is strongly recommended.

Keywords: Anesthetists, satisfaction, dissatisfaction, government hospitals

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Introduction

Job satisfaction refers to employee's positive perception toward their job and different facets of their jobs [1]. It is one of the key variables used to assess the quality of health-care system [2]. It can be influenced by different factors like sufficient salary, a conducive working area, chances for personal growth, a tolerable workload, recognition, patient outcome, good interaction with other workers, independence on the job, career insurance, and professional advancement [3].

Job satisfaction of health professionals has an upbeat relationship with patients satisfaction [4]. On the other hand, job dissatisfaction has a pessimistic impact on patients wellbeing [5] and it also leads to elevated job turnovers that contribute to the scarcity of health professionals [6].

Anesthetists have to deal with stress, erratic work variables, threats of lawsuit, and requirements for continuous vigilance. Moreover, the work environment for anesthetists has some unique and stressful factors. These includes sound pollution and time-consuming and unpredictable surgical procedures, exposure to radiation, and infection, poorly designed work area and shortage of essential monitors [7, 8].

Anesthetic practice is always at high risk in medical profession. Availability of drugs, equipments and suitable work environment are essential to ensure safe, quality anesthesia care [9]. Apparently in most Government hospitals of Addis Ababa working conditions are not suitable. There is a little interaction between the patient and the anesthetist and people are not much aware about the anesthesia & the risks involved. In perioperative deaths, usually anesthetists are blamed. These situations could have an impact on the overall satisfaction of Anesthetists. .

The factors leading to job satisfaction or resulting in dissatisfaction may not be similar but anesthetists are no different from other job categories regarding the effect of job dissatisfaction. Anesthetists share numerous work-related stressors with other health professionals, however they also experience exceptional work environment factors that exposed them to suffering and death, the emotional and physical needs of patients, and pressures to perform consistently and optimally under changing conditions and expectations [9]. Finding ways to retain

anesthetists in the profession to meet the increasing demands of the healthcare system has a great importance. Therefore to attain a good level of job satisfaction among Anesthetists, it is critical to identify and work on the essential work climate characteristics.

As Federal Ministry of Health report of 2014 in Ethiopia there is a shortage of anesthesia professionals. Due to lack of motivation and retention mechanism anesthetists changing their profession to other discipline due to many reason like professional hazard, poor infrastructure, salary, career advancement and technical update training are not organized to the service providers. [10] These factors could affect the level of satisfaction of anesthetists and has an impact on the service.

By the time of planning this study, there was no research that addressed job satisfaction among anesthetists in Addis Ababa. Thus this study aimed at assessing levels job satisfaction and factors affecting among Anesthetists in government hospitals of Addis Ababa.

Methods

The study was carried out in government hospitals of Addis Ababa from April to May 2015. Institution based cross-sectional study design was conducted among selected anesthetists who are on duty at the time of data collection. The sample size was calculated by using single population proportion formula with confidence interval 95% and 5% margin of error, prevalence rate of 50% and taking the non-respondent rate of 10% the sample size becomes 422. By using correction formula the final number of anesthetists who involved in the study was 110.

All governmental hospitals found in Addis Ababa were incorporated in the study then all anesthetists name list was taken as a sampling frame and simple random sampling method was used to obtain the study participants. The study participants were selected using lottery method until desired sample size was achieved

A structured self-administered questionnaire was used to collect data. The questionnaires included two major parts; demography and job satisfaction. Job satisfaction part contained 18 factors, for each factor a respondent rated from a six-point Likert scale which represent different degrees of satisfaction: 1-very dissatisfied, 2-dissatisfied, 3-somewhat dissatisfied, 4-somewhat satisfied, 5-satisfied, and 6-very satisfied. Questions in this part were taken from a published study with a few amendment. The data was collected by 12 under graduate anesthesia students. To guarantee content validity of the tool, the draft questionnaire was submitted to the supervisor for comment regarding the relevance of each item, pre-testing of the questionnaire was done on twenty, year two msc anesthesia students then, possible amendments were made. Training was given for the data collectors. During the data collection, supervision was done by principal investigator. Data cleaning up and cross-checking was done before data processing and analysis.

After coding the data it was entered, and analyzed by using SPSS version 20. A descriptive analysis using Proportion and frequency, mean, standard deviation, were used Association between socio-demographic characteristics and job satisfaction, as well as comparison of overall level of job satisfaction with each factors of satisfaction was assessed for statistical significance using the 'chi square' test of association. *P*-values less than 0.05 were considered statistically significant. The level of job satisfaction was interpreted using a mean score for each factor. Accordingly, the mean score of four and above was taken as being satisfied for each factor while the mean score of below four was classified as being dissatisfied.

Operational Definition

Overall satisfaction: the summation of score given for different factors by using six point Likert scale.

Satisfied: Overall levels of job satisfaction among anesthetists was classified as being satisfied if the sum of the scores for the different factors is between 73-108.

Moderately satisfied: Overall levels of job satisfaction among anesthetists was classified as being moderately satisfied if the sum of the scores for the different factors is between 55-72.

Dissatisfied: Overall levels of job satisfaction among anesthetists were classified as being dissatisfied if the sum of the scores for the different factors is between 18-54.

Ethical consideration

Ethical clearance was obtained from international ethical review board of the College of health sciences and medicine of Addis Ababa University. Accordingly, a letter of support and permission was obtained and given to Hospitals. The advantage and purpose of the study was explained to the participants. Then, for confidentiality of information a written consent was given to the participants and it should be used only for the study purpose.

Result

Socio-demographic-characteristics

A total of 101 anesthetists have responded for the self administered questionnaire and the response rate of the study was 92 %. Of these, 57% were male and 43% were female. The majority of respondents are below the age of 30 years (58.4%), 21.8% of them were between 31 and 40 years. More than half (59.4%) of the respondents were single. The larger proportions were working in teaching hospitals (73.3%) while 37% of the participants had

a part time job. (Table 1)

Table 1: socio-demographic characteristics of respondents at government hospitals in Addis Ababa from April to May, 2015

Characteristics		Frequency	(%)
Gender	Male	58	57.3
	Female	43	42.6
Age (Years)	≤ 30	59	58.4
	31 – 40	22	21.8
	≥ 41	20	19.8
Marital status	Single	60	59.4
	Married	41	40.6
work experience (years)	<1	10	9.9
	1- 5	53	52.5
	6-10	16	15.8
	>10	22	21.8
Educational qualification	Diploma	20	19.8
	BSC	72	71.3
	MSC	9	8.9
Part time Job	Yes	37	36.6
	No	64	63.4
working hours per week	≤ 50 hrs	16	15.8
	51-60 hrs	37	36.6
	61-70 hrs	29	28.7
	71-80 hrs	9	8.9
	>81hrs	10	9.9
Type of hospital	Teaching	74	73.3
	Community	27	26.7

Job satisfaction for each factor

Table 2 shows the overall mean for job satisfaction among various factors. They revealed that satisfaction in helping others 5.39(1.406), Patient outcome 4.95(6.249) , Providing good quality of patient care 4.87 ± 1.22, responsibilities 4.82± 1.330 ,and feeling about job itself 4.75± 1.658 are variables in which Anesthetists were satisfied with . According to the average score, each of the anesthetists were dissatisfied with the remaining factors. The highest level of dissatisfaction was reported for public awareness about the role of anesthetists 2.17(1.256).This was followed by salary 2.28±1.282 ,opportunities for advancement 2.49±1.128, remuneration for professional hazard 2.52±4.256 opportunities for training or education2.62±1.248),and workload 2.80 ±1.319) respectively.

Table 2: Job satisfaction level on each factor of anesthetists working at government hospitals in Addis Ababa from April to May,2015.

Sr.No	Factors of satisfaction	Overall Mean ± SD
1	Resource and supplies	3.11 ± 1.96
2	satisfaction in helping others	4.39 ± 1.41
3	Surgeons' attitudes towards anesthesia	2.86 ± 1.28
4	Public awareness about the role of anesthetists	2.17 ± 1.26
5	Opportunities for advancement	2.49± 1.13
6	Opportunity for training or education	2.62 ± 1.25
7	Income	2.28 ± 4.256
8	Work load	2.80 ± 1.319
9	Providing good quality of patient care	4.87 ± 1.222
10	Patient outcome	4.95± 6.249
11	Clear cut responsibilities	4.82± 1.330
12	Physical working place conditions	3.04± 1.326
13	Assistance you have in operating room	3.06± 1.392
14	Freedom to choose method of working	3.91± 1.289
15	Enjoy status as a healthcare professional	3.54± 1.487
16	Receive recognition for tasks well done	2.76± 1.429
17	Remuneration for professional hazard	2.52± 1.282
18	General feeling about job itself	4.75± 1.658

Overall level of job satisfaction

As it is indicated on figure 1 below, from the total participants 16.16(16%) of the respondents were satisfied 37.37(37%) moderately satisfied, while the remaining 47.47(47%) were dissatisfied.

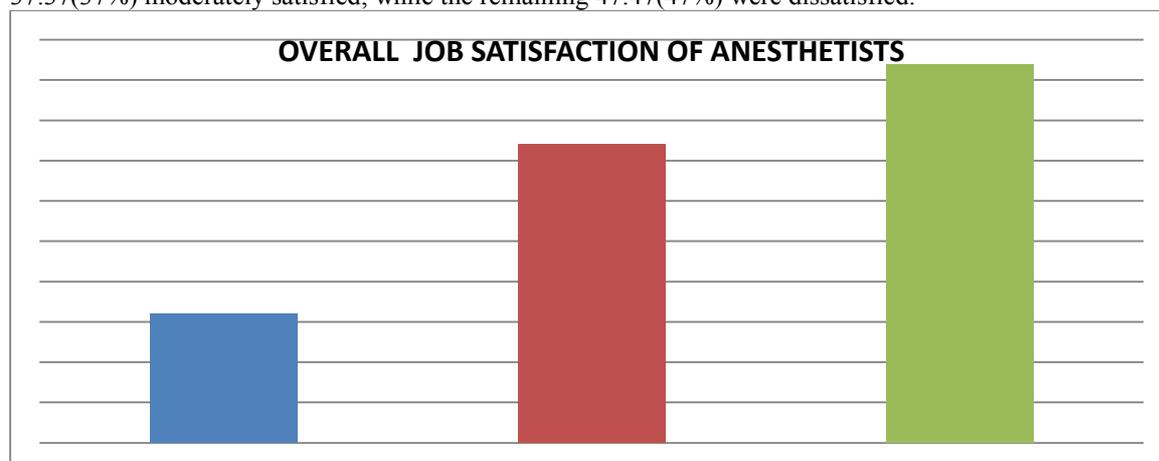


Fig.1:- Overall level of job satisfaction of anesthetists working in government hospitals of Addis Ababa from April to May, 2015.

Association between socio demographic variables and overall job satisfaction

Satisfaction according to socio-demographic variables showed that more females 21(48.8) were dissatisfied than males 20(34.5); highest dissatisfaction rate was in the age group of below thirty 27(45) and the lowest at age greater than forty one 8(36.3). According to this study Single respondents were more dissatisfied 26(42.7) than married 15(37.5), while satisfaction level for those who do have part duty and do not have was found nearly at the same level of satisfaction 22(59.45), 38(59.3) respectively. Most of the respondents at the educational level of MSC were dissatisfied 67%. Chi square test of association was used to determine the association between job satisfaction and socio demographic variables and no association was found as its show on table 3.

Table 3: Association between socio demographic variables and overall job satisfaction of anesthetists working at government hospitals in Addis Ababa from April to May, 2015.

Variables		Level of satisfaction		P-value
		Satisfied N (%)	Dissatisfied N (%)	
Gender	Male	38(65.5)	20(34.5)	0.146
	Female	22(51.2)	21(48.8)	
Age (Years)	≤ 30	33(55)	27(45)	0.480
	31 – 40	13(61.9)	8(38.1)	
	≥ 41	14(63.6)	8(36.3)	
Marital status	Single	35(57.3)	26(42.7)	0.381
	Married	25(62.5)	15(37.5)	
Work experience (years)	<1	7(63.6)	4(36.3)	0.945
	1- 5	30(54.5)	22(45.5)	
	6-10	9(56.25)	7(43.75)	
	>10	14(63.63)	8(36.3)	
Professional level	Diploma	10(50)	10(50)	0.116
	BSC	47(68.11)	22(31.88)	
	MSC	3(33.3)	6(66.66)	
Part time Job	Yes	22(59.45)	15(40.54)	0.581
	No	38(59.3)	26(40.7)	
working hours per week	≤ 50	12(75)	4(25)	0.10
	51-60	22(59.4)	15(41.6)	
	61-70	13(44.8)	16(55.2)	
	71-80	8(88.9)	1(11.1)	
	>81	5(50)	5(50)	
Type of hospital	Teaching	41(54.6)	34(45.4)	0.11
	Community	19(73.1)	7(26.9)	

Comparison of factors associated with job satisfaction

Table 4; shows the chi-square analysis results of factors associated with job satisfaction. The results showed that satisfaction in helping others, surgeons' attitude and perception towards anesthesia, responsibilities, freedom to choose method of working, and enjoy status as a health care professional, were significantly associated with job satisfaction. Almost (70%) of respondents were highly satisfied with helping others, at p value .000. Almost three-quarters (75%) of participants were significantly satisfied with their responsibilities. The results also indicated that respondents were significantly satisfied with the receive recognition for tasks well done, and general feeling about job itself at p value .001.

Table 4: Comparison of factors associated with job satisfaction of anesthetists

No	Job characteristic	Level of satisfaction for each factor	Overall Level of satisfaction		P-value
			Satisfied	Dissatisfied	
1	Availability of resource and supplies	Satisfied	29	9	0.006
		Dissatisfied	31	32	
2	Helping others	Satisfied	53	23	0.000
		Dissatisfied	6	18	
3	Surgeons' attitudes and perception towards anesthesia	Satisfied	24	5	0.002
		Dissatisfied	36	36	
4	Public perception about the role of Anesthetists	Satisfied	13	1	0.005
		Dissatisfied	47	39	
5	Opportunities for advancement	Satisfied	16	3	0.012
		Dissatisfied	44	38	
6	Opportunity for training or education	Satisfied	21	5	0.008
		Dissatisfied	39	36	
7	Salary	Satisfied	11	3	0.0001
		Dissatisfied	49	38	
8	Total working hours	Satisfied	23	8	0.035
		Dissatisfied	37	33	
9	Providing good quality of patient care	Satisfied	42	22	0.072
		Dissatisfied	18	19	
10	Patient outcome as a result of your contribution	Satisfied	49	30	0.22
		Dissatisfied	11	11	
11	Clear cut responsibilities	Satisfied	48	16	0.001
		Dissatisfied	14	23	
12	Physical working place conditions	Satisfied	32	8	0.001
		Dissatisfied	28	33	
13	Assistance you have in operating room	Satisfied	30	11	0.016
		Dissatisfied	30	30	
14	Freedom to choose your method of working	Satisfied	51	17	0.000
		Dissatisfied	9	24	
15	Enjoy your status as a healthcare professional	Satisfied	43	14	0.098
		Dissatisfied	17	27	
16	Receive recognition for tasks well done	Satisfied	43	14	0.000
		Dissatisfied	17	27	
17	Remuneration for professional hazard	Satisfied	15	1	0.001
		Dissatisfied	45	40	
18	General feeling about job itself	Satisfied	45	17	0.001
		Dissatisfied	15	24	

Discussion

This study showed that there is a low level of job satisfaction among anesthetists in government hospitals of Addis Ababa. 53% of the respondents were satisfied with their job which is comparable to the finding of study in Nigeria roughly 58% of the respondents were fully satisfied [11]. According to the comparative study of job satisfaction level among various job categories in USA, the level of satisfaction for nurse anesthetists were the highest (94.7%) and anesthesiologists scored the second position and their job satisfaction was 88% overall which contrast to finding of this study [12].

In this study, forty seven percent respondents were dissatisfied with their job. The major reasons were lack

of public awareness about the vital role played by anesthetists in patient care in operating room and inadequate salary. This finding is similar with the finding of a study done in 2010 in Pakistan, that had been reported as improving fee structure and public awareness about the role of anesthetists helps to improve the job satisfaction level and so far the quality of care provided^[13].

According to this study the first four reasons given for job satisfaction were the patient outcome (78%), helping others (75%), providing good qualities of care (64%) and general feeling about the job, this is consistent with a study done in Canada in which job satisfaction among anesthesiologists is significantly associated with intellectual stimulation, quality of care and interaction with the patients^[14].

Inadequate salary was one of the most common reasons of dissatisfaction among study participants in this study. This is also similar with a study done by Jimma, south west Ethiopia^[15]. In contrast, that does not seem to be a problem in Canada as evidenced by a survey of 2001^[16]. That discrepancy may be due to differences in the economic status of the health-care system.

Socio-demographic variables were used to locate the differences in overall job satisfaction. This study found that anesthetists who become more seniors were more satisfied than their younger staffs. That may be because of their adaptation to their work environment. This is consistent with previous research showing that professionals mature with age and accumulate more experience, which tends to foster a better adjustment to the work environment^[14].

The environment in which individuals work has a tremendous effect on the level of pride in themselves and the work they do. The job that is interesting and that permits one to contribute one's idea and skill are very important in respect to anesthetists. As long as sufficient resources are at their disposal, anesthetists are able to manage their high demanding tasks and task related stressors very efficiently^[2]. An interesting job as a sole factor would not suffice for an adequate job satisfaction. Improving working condition and providing adequate resource will definitely help in enhancing job satisfaction^[2]. This study found that lack of resource and supplies and poor physical working place condition were major reasons for dissatisfaction. These findings were supportive of the findings of Singh et al. (2013) in Ghana where the study found a very low level of job satisfaction regarding with the lack of resources and equipment^[17]. It is also similar with the finding of Shidhaye et al. in which lack of resource and equipment was the major aspect of work bringing dissatisfaction reported among anesthesiologists^[13].

A good relationship with the surgeon is of fundamental importance in the practice of anesthesia. Poor interpersonal relationships may lead to considerable stress in the OR where anesthetists may feel powerless to change or control situations in an environment and where the surgeon is commonly perceived to be in charge^[18]. In this study, perception of surgical attitudes toward anesthetists significantly affected overall job satisfaction. This finding is consistent with the study done in Canada^[13].

Conclusion

There is a low level of job satisfaction among anesthetists who are working in government hospitals of Addis Ababa. The major reasons of dissatisfaction were lack of public awareness about the vital role of anesthetists, inadequate salary, lack of promotion, insufficient resources and supplies and poor physical working place conditions.

The main factors that are associated with job satisfaction were satisfaction in helping others, responsibilities, freedom to choose method of working, and enjoy status as a health care professional.

Hence, these needs great attention by creating awareness for the society regarding the field anesthesia and the role played by anesthetists in patient care, increasing salary, providing further educations, improving the physical working environments, availing the necessary resource and supplies that are useful for health care delivery services is highly recommended.

Authors' Contribution

Author 1: BK: Initiated the research, wrote the research proposal, conducted the research, did data entry and analysis and wrote the manuscript.

Author 2: LA,: Involved in the write up of the proposal, critical review and write up of the manuscript.

Author 3: AGK, EAB, MSO, LH and TTH: Involved in conception of the study, data analysis and write up of the manuscript. All authors read and approved the final manuscript.

Author's information

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Competing Interests

Author(s) disclose no potential conflicts of interest.

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