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# Ethiopian Anesthetists Job Satisfaction Level and Factors Affecting Their Level of Job Satisfaction

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**Abstract:** Anesthetists are one of the main parts in a surgical team for the provision of quality surgical care. Professional satisfaction can result in professional retention and patients' satisfaction. The objective of this study was to determine level of job satisfaction of anesthetists working in Ethiopia and factors affecting their level of job satisfaction, August 2014. A cross-sectional survey was conducted to determine the level and factors affecting level of job satisfaction of Ethiopian anesthetists from August 28-30, 2014, where anesthetists came for 10th annual conference and refresher courses prepared by Ethiopian Anesthetists association. Data was collected using self-administered questionnaire and the collected data was checked at the end of each day for their completeness, and consistency and it was cleaned manually entered into a computer and analyzed using SPSS version 16.0 windows statistical software. Chi-square tests were made to evaluate the association of different variables with job satisfaction, and P-value < 0.05, was taken as cut-off point for statistical significance. A total of 242 Anesthetists have responded for the self-administered questionnaire from 265 questionnaires distributed to volunteers, giving a response rate of 91.3%. The result showed that 111(45.8%) of the anesthetists were satisfied with their job while 128(54.2%) were dissatisfied with their job. The major reasons reported for their dissatisfaction were - incentive 69(58.9%). Further education 46(39.3%), training opportunities 117(48.3%) and insufficient resources and supplies. The major reasons are given for getting satisfaction 111(45.8%) were: -from helping others 51(50.0%) and professional gratification 34(33.3%). Job satisfaction of Ethiopian anesthesia professionals was found to be low (45%). Responsible bodies should find a way to improve job satisfaction and retention of Anesthesia professional so as to improve the healthcare services of the hospital.

**Keywords:** Anesthetists, Satisfaction, Dissatisfaction

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## 1. Introduction

The term 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]

Job satisfaction is an important indicator of working life quality. The concept of job satisfaction has been developed in many ways by many different researchers and practitioners. One of the most widely used definitions in organizational research is that of Locke (1976), who defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"[2]

The range of Affect Theory (1976) is arguably the most famous job satisfaction model. The main premise of this

theory is that satisfaction is determined by a discrepancy between what one wants in a job and what one has in a job. Further, the theory states that how much one values a given facet of work (e.g. the degree of autonomy in a position) moderates how satisfied/dissatisfied one becomes when expectations are/aren't met.

When a person values a particular facet of a job, his satisfaction is more greatly impacted both positively (when expectations are met) and negatively (when expectations are not met), compared to one who doesn't value that facet.

Job satisfaction can be influenced by a variety of factors, including the quality of relationships with superiors and colleagues, the degree of fulfillment at work and prospects for promotion. Satisfied employees tend to be more productive and creative. Studies have shown a direct correlation between physicians' satisfaction and patients' satisfaction. High job satisfaction levels among doctors reduce their susceptibility to

burnout and mental disorders.

Dissatisfied medical staff are more prone to burnout which decreases patient safety. A satisfied doctor is more committed to work and more willing to make sacrifices, exhibits greater productivity levels and lowers labor costs, contributes to patient satisfaction, and is a prerequisite for a good work environment.

A key constraint to achieving the millennium development goals (MDGs) is the absence of a properly trained and motivated workforce. Loss of clinical staff from low and middle-income countries is crippling already fragile health care systems. Health worker retention is critical for health system performance and a key problem is how best to motivate and retain health workers (3) It is very important to study about this professional's job satisfaction and any factors affecting their level of job satisfaction as this professional dissatisfaction will have a great impact on surgical patients care and outcome.

## 2. Rationale of This Study

Number of Ethiopian anesthetists is estimated to be about 900, this anesthetists professionals include MSC anesthetists, Bsc anesthetists, Diploma anesthetists and level V anesthetists with different service years as described in (table 2 below) of result part, this anesthesia professionals were employed and working in both governmental and non-governmental hospitals see (table 1) of result part in different hospital setting were many of this setting has poor /no monitors, anesthetic medications and other emergency drugs to manage perioperative incidents this can affect job satisfaction of this anesthetists. Regarding number of anesthetist assigned per single operation table is one in almost all hospitals except University teaching hospitals were few consultant anesthesiologist, resident and MSc students available and one anesthetist for emergency night duty for all non-teaching hospitals. Currently, annually the country produce about 140 Bsc new graduates anesthetists from seven anesthesia teaching Universities and there are no Diploma and Level V anesthetist teaching colleges and no new graduates since 2014.

Anesthetists have the responsibility of patients' lives under anesthesia: they tend to work independently, and having to make rapid, life-saving decisions often at stressful times. The scope of practice of anesthesia has widened and now takes not only pre- operative preparation, Intra- operative anesthetic management but also include running ICU, pain management (acute and chronic), teaching both under -graduate and post-graduate and research.

Lack of job satisfaction has been linked not only to turnover, absenteeism, tardiness, waste, grievances, and accidents, but also to employee receptivity to change, loyalty, commitment to organizational objectives, and degree of participation and contribution, hence it is very important to determine level of job satisfaction and factors affecting job satisfaction of Anesthetists and Provide important information for both professionals and government to take necessary actions to retain this profession as there is no literature on job

satisfaction and factors affecting the level of job satisfaction of anesthetists in the country.

## 3. Operational Definitions

Job satisfaction-"a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences".

Anesthetist: is a qualified health care professional who prepares the patient before surgery administers anesthetics to produce total or partial loss of sensation in patients during surgical or diagnostic procedures and continually monitors patient's reaction to anesthesia, stress of the procedure as well as patient's vital sign in order to maintain the normal physiologic setup throughout the procedures and insures pain during, after the procedure and works in a team contributing her/ his critical role to maximize patient safety, comfort and better procedure outcome.

### 3.1. Diploma Anesthetist

Nurse Anesthetist is a diploma qualified nurse who, having been admitted to an anesthesia educational program, duly recognized in the country and has successfully completed additional training in anesthesia and has been licensed by the regulatory authority to provide anesthesia services.

### 3.2. BSC Anesthesia

Anesthesia Professional is a person who, having been admitted to an anesthesia educational program, duly recognized in the country and has successfully completed the prescribed course of baccalaureate-level studies for four years and has been licensed by the regulatory authority to practice anesthesia care at a professional anesthetist level.

### 3.3. MSC Anesthesia

Anesthesia Specialist is a qualified anesthesia professional (BSc) who, having been admitted to MSc educational program, duly recognized in the country and has successfully completed the prescribed course of Master of Science studies for two years and has been licensed by the regulatory authority to practice as anesthesia specialist.

### 3.4. Level V Anesthetists

Nurse Anesthetist Level V is a TVET level IV nurse who, having been admitted to TVET anesthesia educational program, duly recognized in the country and has successfully completed one year the prescribed course of level V studies and has been licensed by the regulatory authority to practice anesthesia services.

## 4. Methods and Materials

Assumptions. In considering this research project, several assumptions were made in the methodology. The first is that although job satisfaction may not be independent of other life satisfactions such as family relationships, health, and social status, it is still possible to investigate certain job factors as

areas affecting that satisfaction which comes from work.[6] Another assumption is that it is possible to be satisfied with one aspect of work and be dissatisfied with other aspects. The composite attitude toward the work situation will be a result of the relative importance of the factors with which one is satisfied or dissatisfied and the intensity of the feelings.

It is also assumed for this study that job satisfaction and dissatisfaction lie at opposite ends of a continuum. It is realized that there are persons and situations in which the degree of satisfaction will vary from day to day but it is assumed that in most cases, the range of the degree of satisfaction will be narrow and that the proportion of persons who view themselves as dissatisfied on one day will not vary greatly from the proportion that would rate themselves dissatisfied on another day. The validity of the questionnaire is also assumed. [6]

The objective of this study was to determine the level of job satisfaction of anesthetists working in Ethiopia and factors affecting their level of job satisfaction. Using cross-sectional survey from 28-30 August, 2014 a total of 242 voluntary anesthetists presented to attend 10th Ethiopian association of anesthetist annual conference were included in this study. Data was collected using self-administered questionnaire and the collected data was checked at the end of each day for their completeness, and consistency, and it was cleaned manually and entered into a computer and analyzed using SPSS version 16.0 windows statistical software. Chi-square tests were done to evaluate the association of different variables with job satisfaction and p-value < 0.05 was considered statistically significant. About 23 self-administered questionnaires were not included in this study because of they are not well completed by respondents.

*Ethical considerations* -Before the actual data collection process, an official permission letter was obtained from Ethiopian association of anesthetists (EAA) and in addition the brief explanation of the study objective was given for study subjects and Confidentiality will be ensured by the principal investigators.

## 5. Result

Out of the total 265 self-administered questionnaire distributed to anesthetists those presented on the 10th annual conference of Ethiopian association of anesthetists 242 of them returned the questionnaire making the response rate 91.32%.

Majority 175(76.4%) of them were males and the rest were females, among males 103(59.9%) dissatisfied and of females 39(58.2% and 28(41.8%) satisfied and dissatisfied respectively this shows female anesthetists were more satisfied as compared to males and there is association between sex and satisfaction ( $p=0.0251$ ). 64(27.4%) were in the age 30-34 years followed by 25-29 years 60(25.6%), and 25-29 years age groups and < 20 years were more satisfied age groups as compared to others while 30-34 years 40(62.5%) and 40-44 years 7(87.5%) were more dissatisfied age groups.

About 116(48.5%) Orthodox followed by Muslim 51

(21.3%) and there is no association between religion and job satisfaction. More of those single in marital status and married were dissatisfied 63(54.3%) and 55(51.9%) respectively while divorced and widowed were comparatively more satisfied 9(76.1%) and 6(57%) and there was no association between marital status and job satisfaction of anesthetists (Table. 1)

Regarding years of service majority them were served 1-5 years 103(42.6%) followed by 5-10 years 78(32.2%) and those who served 5-10 years 36(46.2%), 10-15 years 13(44.8%) and >15 years 6(46.2%) were satisfied and almost similar figures of this groups were dissatisfied and there was no association between service years and job satisfaction of this professionals.

Regarding distribution of their educational level majority 177(73.7%) were BSC, 27(11.3%) were level V and all of the level V anesthetists were dissatisfied (100%) while 14(82.3%) of MSC were satisfied and the rest almost have similar satisfaction and dissatisfaction rates and there is significant association between educational level and job satisfaction ( $P=0.0001$ ). 240 (99.1%) of them has clinical responsibility at Operation theatre 111(45.9%) were satisfied while 129(54.1%) of them were dissatisfied of their job and only 10(0.9%) has clinical responsibility at ICU and pain clinic.

Concerning salary distribution about 147 (69.0%) were getting <3000 Ethiopian birr of this 55(37.4%) them were satisfied and 92(62.6%) dissatisfied, only 19 (8.9%) were getting >4000 Ethiopian birr and there is strong association between salary level and level of job satisfaction ( $P=0.0001$ ).

Regarding type of hospital they are serving in about 96 (39.6%) referral hospital of this 56(58.4%) them dissatisfied, 43(17.7%) working at university teaching hospital of which 26(59.5%) were dissatisfied and 9(100%) of those working at health center were dissatisfied and there is significant association between type of hospital anesthetists working in and level of their job satisfaction (0.0105).

Only 4.9% of them have off work job with only 7(58.3%) get >3000 E birr per month and average working hours of 51-60hrs 112(52.5%) (Table.2)

About 111(45.8%) were satisfied and they were satisfied because of the following reasons: satisfaction in helping others 51(50.0%), professional gratifications 34(33.3%) and job 17(16.7%) security (salary) and some of the dissatisfaction reasons were 69(58.9%) incentives problems, 46(39.3%) lack of further educations, 61(52.1%) lack of emergency drugs, 50(42.7%) In-service training dissatisfied 10(8.7%) (Table.3).

Major reasons to stay stated by anesthetists were Satisfaction with job 11(13.7%), chance for further education 16(20%) to complete the commitment to serve the government institute 33(41.2%) and common reasons to leave the their Hospital were Job dissatisfaction 30(30.6%) and change of profession 32(32.6%) and their main intention after leaving were working in other governmental hospital 51(55.4%) and Work in NGO/private 22(23.9%) and 4(4.3%) planned to run their own business (Table.4)

Major suggestions are given to retaining anesthetists were increasing their salary (96.3%), providing a chance for further educations (87.1%) and motivations by incentives (77.7%) (Table.5).

**Table 1.** Job satisfactions versus socio-demographic characteristics of Ethiopian anesthetists.

Variable	Total No (%)	Satisfied No.(%)	Dissatisfied No.(%)	p-value
Sex(N=242)				
Male	175(76.4%)	72(41.1%)	103(59.9%)	0.0251
Female	67(23.6%)	39(58.2%)	28(41.8%)	
Age (N=234)				
<25	49(20.9%)	20(40.8%)	29(59.2%)	0.9203
25-29	60(25.6%)	26(43.3%)	34(56.7%)	
30-34	64(27.4%)	24(37.5%)	40(62.5%)	
35-39	40(17.1%)	13(32.5%)	27(67.5%)	
40-44	13(5.6%)	4(30.7%)	9(69.3%)	
>45	8(3.4%)	1(12.5%)	7(87.5%)	
Religion (N=239)				
Orthodox	116(48.5%)	53(45.7%)	63(54.3%)	0.438
Muslim	51(21.3%)	28(54.9%)	23(45.1%)	
Protestant	44(18.4%)	17(38.6%)	27(61.4%)	
Catholic	21(8.8%)	11(52.4%)	10(47.6%)	
Others	7(2.9%)	2(28.6%)	5(77.4%)	
Marital status (N=240)				
Single	111 (46.3%)	45 (40.5%)	65(59.5%)	0.1272
Married	106 (44.5%)	51 (48.1%)	55(51.9%)	
Divorced	12(4.8%)	9(76.1%)	3(23.9%)	
Widowed	11(4.4%)	6(57%)	5(43%)	

**Table 2.** Job satisfaction and service years, educational level, clinical responsibility, salary, type of hospital, off work job and income and working hours.

Variable	Total No (%)	Satisfied No (%)	Dissatisfied No. (%)	P-value
Service years (N=242)				
<1	19(7.4%)	9(47.4%)	10(52.6%)	0.9998
1-5	103(42.6%)	47(45.6%)	56(54.4%)	
5-10	78(32.2%)	36(46.2%)	42(54.8%)	
10-15	29(11.9%)	13(44.8%)	16(56.2%)	
>15	13(5.4%)	6(46.2%)	7(54.8%)	
Educational status(N=240)				
Level V	27(11.3%)	0(0.00%)	27(100.0%)	0.0001
Diploma	22 (9.2%)	10(45.4%)	12(54.6%)	
Bsc	177(73.7%)	87(49.1%)	90(50.9%)	
Msc	17(5.8%)	14 (82.3%)	3(17.7 %)	
Clinical responsibility(N=242)				
Operation theatre	240 (99.1%)	111(45.9%)	129(54.1%)	0.113
ICU	7(2.9%)	2(28.5%)	5(71.5%)	
Pain clinic (acute and chronic)	3(1.2%)	3(100%)	0(0.00%)	
Salary (N=213)				
<3000	147 (69.0%)	55(37.4%)	92(62.6%)	0.0001
3000-4000	47 (22.1%)	40(85.1%)	7(14.9%)	
>4000	19 (8.9%)	7(36.8%)	12(63.2%)	
University Teaching hospital	43(17.7%)	17(39.5%)	26(59.5%)	0.0105
Referral hospital	96 (39.6%)	40(41.6%)	56(58.4%)	
District hospital	44(18.2%)	19(43.1%)	25(56.9%)	
Private hospital	13(5.3%)	10(76.9%)	3(23.1%)	
Health center	9(3.7%)	0(0.00%)	9(100.0%)	
Off work job income (N=12)				
<2000	2(16.7%)	2(16.7%)	0(0.00%)	-
2000-3000	3(25.0%)	2(66.7%)	1(33.3%)	
>3000	7(58.3%)	4(57.1%)	3(46.9%)	
Average working week(N=213)				
<50	72(33.8%)	41(56.9%)	31(43.1%)	0.0383
51-60 hrs	112(52.5%)	48 (42.8%)	64(57.2%)	
61-70 hrs.	21(9.8%)	5(23.8%)	16(76.2%)	
71-80 hrs.	6 (2.8%)	1(16.7%)	5(83.3%)	
>81 hrs.	2(0.9%)	1(50.0%)	1(50.0%)	

**Table 3.** Reasons for job satisfactions and job dissatisfactions of Ethiopian anesthetist June 2014.

Variable	Total No. (%)
Reason for satisfaction (N=102)	
Professional gratification	34(33.3%)
Satisfaction in helping others	51(50.0%)
Job security(salary)	17(16.7%)
Reasons for dissatisfaction(N=117)	
Lack of motivation using	
Housing	32(27.3%)
Incentives	69(58.9%)
Free health care	16(13.8%)
Beaurocratic management in relation to(N=117)	
Annual leave	9 (7.7%)
Further education	46(39.3%)
Transfer	22(18.8%)
Leave governmental institution	14(11.9%)
Lack of promotion	26(22.2%)
Insufficient resources and supplies of:(N=117)	
Anesthesia instruments	40(34.2%)
Emergency drugs	61(52.1%)
Poor infrastructure	16(13.7%)
Insufficient training (N=117)	
Long term training	26 (22.2%)
Short term training	41(35.0%)
In-service training	50(42.7%)

**Table 4.** Reasons to stay, reasons to leave and intension of anesthetists after leaving their hospital/job, June 2014.

Reason to stay (N=80)	Number (%)
Satisfaction with job	11(13.7%)
To get chance for further education	16(20%)
To complete the commitment to serve the government institute	33(41.2%)
Family related issues	14(17.5%)
Personal related issues	6(7.5%)
Reasons to leave (N=98)	
Job dis-satisfaction	30(30.6%)
Family related issue	9(9.2%)
Personal related issues	27(27.6%)
Change of profession	32 (32.6%)
Intention after leaving the institution(N=92)	
Working in other governmental organization	51(55.4%)
Work in NGO/private	22(23.9%)
Work in non-health institution	15(16.3%)
Running own business	4(4.3%)

**Table 5.** Suggestion given to retain anesthesia professionals in Ethiopia, April, 2014.

Suggestion	(No. (%))
Motivation of staffs with incentives	188(77.7%)
Increasing salary	233(96.3%)
Provide house/house allowance	164(67.7%)
Professional respect and recognition	202(83.4%)
Provision of housing or housing allowance	186 (76.8%)
Provide further education	211(87.1%)
Frequent in service training	172(71.0%)
Avail medical instruments, supplies, drugs, chemical reagents	144(59.5%)
Improve hospital facility, infra-structure and working condition	133(54.9%)
Establish good system for administration and management	87(35.9%)
Identification of level and arrange their salary for level V	27(11.2%)
Improving professional hazard allowance payment	72(29.7%)
Total	242(100%)

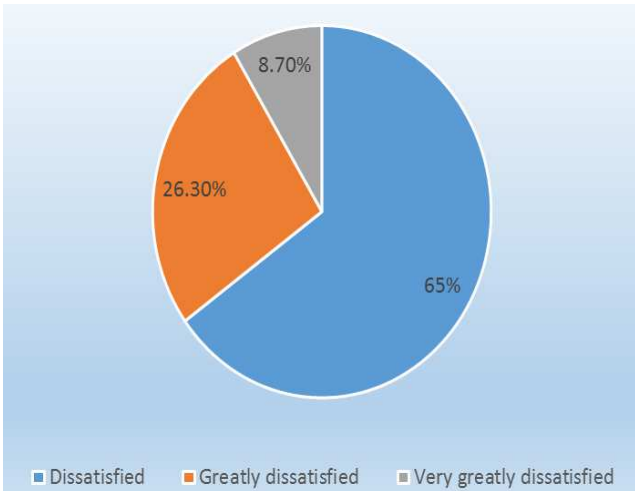


Fig. 1. Level of Ethiopian anesthetist job dissatisfaction (N=117).

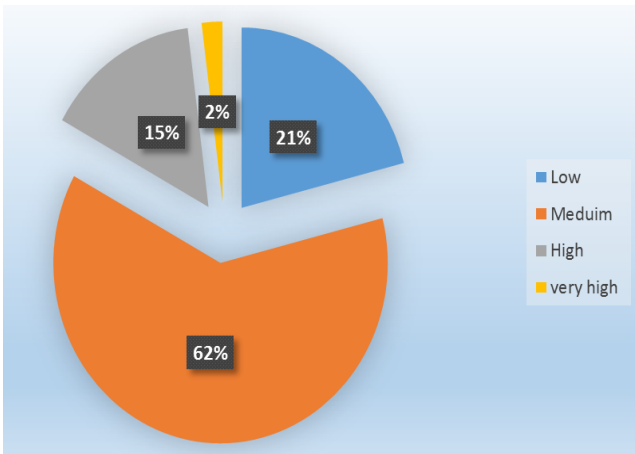


Fig. 2. Level of satisfaction among the satisfied anesthetists (N=111).

In general of the satisfied 111(45.8%) about 69(62.2%) have medium level of satisfaction while of the dissatisfied 128(54.2%), 31 (26.5%) greatly dissatisfied and Very greatly (8.7%) (Fig. 1 and Fig. 2)

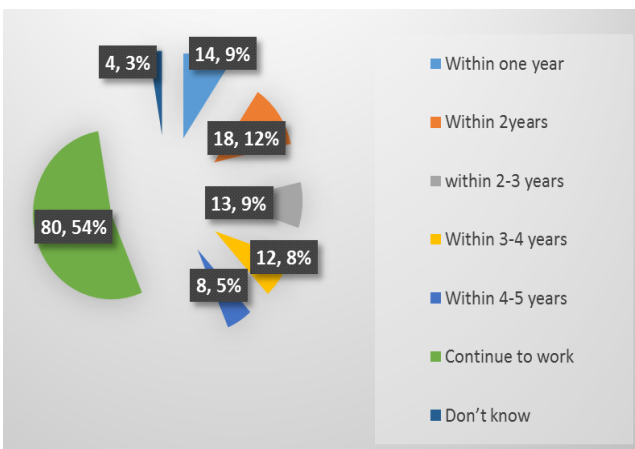


Fig. 3. Future plan of Anesthetist to work in their current Hospital (N=149).

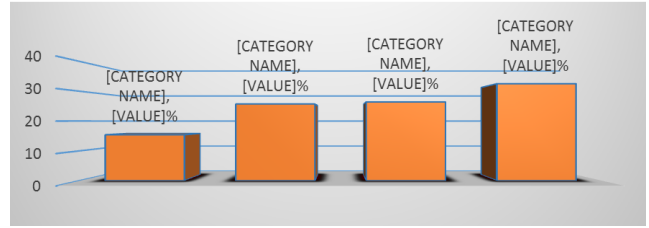


Fig. 4. Causes of stress for Ethiopian Anesthetists.

As clearly seen from this above figures of those planned to leave their institution or job majority planned to leave within the coming two years (18) and within the coming one years (14) respectively.

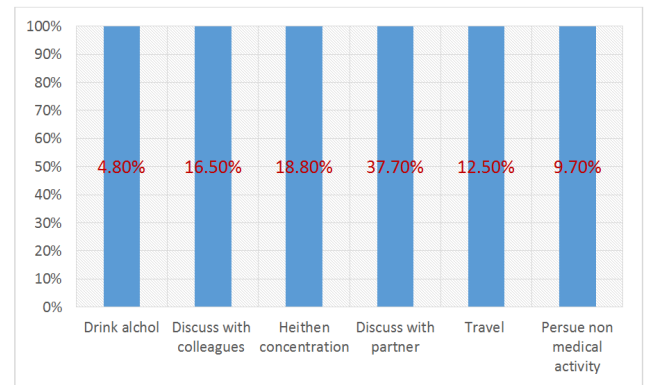


Fig. 5. Mechanisms used by anesthetists as reaction to stress.

Regarding anesthetists reaction to job stress, majority of them prefer to discuss with their partners (37.7%) and (18.8%) of them prefer heithen concentration (Fig.5)

## 6. Discussion

High level of job satisfaction by anesthetists has high value such as higher professional retention and patients satisfaction and job satisfaction is also factor that determines whether an employee will remain in a position or seek work elsewhere [4]. Furthermore, job satisfaction can influence the quality of anesthesia service.

This study has identified the satisfaction and dissatisfaction level of anesthetist to be (45.8%) and (54.2%) respectively, this is much lower as compared to the study was done in Poland which is (71.32%) (5) of anesthesiologists were satisfied of their job, this high rate of dissatisfaction as already described in the result part of this study were lack of motivation for this profession, bureaucratic management related, poor infrastructure, and equipment and medications, poor in service training and very few educational opportunity (Table.4 above).

Similarly this rate of dissatisfaction is much higher as compared to the study done on CRNAs in southwestern Pennsylvania 21%, [6] their major sources of dissatisfaction were the poor quality of the junior staff and too much time committed to routine work in the operating room, preventing them from participating more as members of the medical team.

Other studies done on Job satisfaction among public health professionals working in public sector in Pakistan has shown overall, satisfaction rate was 41% only, while 45% were somewhat satisfied and 14% of professionals highly dissatisfied with their jobs. For those who were not satisfied, working environment, job description, and time pressure were the major causes of dissatisfaction [7]

Regarding sex about 103(59.9%) males dissatisfied and of females 39(58.2%) and 28(41.8%) satisfied and dissatisfied respectively this shows female anesthetists were more satisfied as compared to males and there is association between sex and satisfaction ( $p=0.0251$ ) this is similar to the study finding of Professional Satisfaction in Developing Countries where females (89%) and (69.7%) males were satisfied with their job [14].

Concerning salary distribution of this anesthetists about 147 (69.0%) were getting <3000 Ethiopian birr of this 55(37.4%) them were satisfied and 92(62.6%) dissatisfied, only 19 (8.9%) were getting >4000 Ethiopian birr and there is strong association between salary level and level of job satisfaction ( $P=0.0001$ ) this finding is different as compared to the study done in Poland on anesthesiologist which shows more than a half of participating anesthetists(55.3%) expressed satisfaction with their current income this difference can be due to the socio-economic difference between this country [5].

Regarding type of hospital they are serving in about 96 (39.6%) referral hospital of this 56(58.4%) them dissatisfied, 43(17.7%) working at university teaching hospital of which 26(59.5%) were dissatisfied and 9(100%) of those working at health center were dissatisfied and there is significant association between type of hospital anesthetists working in and level of their job satisfaction(0.0105) this is similar as compared to the study done on anesthesiologist Professional Satisfaction in Developing Countries ( $P<0.05$ ) [14].

This study also identified other factors influencing the level of satisfaction such as low salaries, lack of training opportunities, improper supervision, and inadequate financial rewards and this were almost similar to the study done in Pakistan on health professionals working in public hospitals [7].

The study conducted on Job satisfaction among anesthetists at a tertiary hospital in Nigeria has shown Overall (58.7%) of the anesthetists were satisfied with their job. 8.7% were very satisfied, 6.5% were very dissatisfied[8] they have higher level of job satisfaction unlike our study participants this difference may be due to anesthetists work more of consultations activity, the sample size difference and number of anesthetists per table and general working environment difference.

Stress has been defined as a process by which certain situational demands are appraised by an individual as exceeding his own resources, resulting in undesirable health consequences[9,11]. When the stressed person is anesthetist, this can have profound implications on the patients as well as on his/her interpersonal relationships.

Regarding causes and reaction to job stress this study has shown clinical problems 32.5%, communication problems 26.7%, time constraints to perform the procedures

25.7%, medico-legal issues 15.4% respectively and this is almost similar as compared to the study done in south Indian anesthetists has shown the major causes of stress were inherently difficult job situations(e.g. difficult intubation or recovery), interpersonal conflicts (e.g. lack of communication within the team, with the surgeon), and life career worries have been the cause of stress in anesthetists[9,11], the common methods used by anesthetists to overcome their stress were discussion with partner, heightening concentration, travel and pursuing none- medical activities.

Time pressure was identified as the leading cause of discontentment, followed by long working hours. Time constraint was also cited as the most common reason for stress among anesthetists in Australia and New Zealand [10, 11, 13] this may be similar to this study finding despite many differences that may exist among this two study areas.

About 40% of this study participants has the need of leaving either their job or working institution/hospital because of different reasons among them Job dissatisfaction, Family related issue Personal , related issues, Change of profession respectively (Table 4) similarly they have indicated their intention after leaving which were Working in other governmental organization, Work in NGO/private, Work in non-health institution and Running own business (Table 4) this result has implication to concerned body to timely address this problem and retains this key profession.

They also provided important suggestions to retain this profession in the future of which: motivation of staffs with incentives, increasing salary, providing further educations, giving recognition and respect of this profession.

## 7. Conclusion

Based on this study finding the following conclusion was drawn and they can lead to necessary recommendations and intervention by the concerned body.

1. There is a high rate of job dissatisfaction (54.2%) among Ethiopian anesthetists.
2. The main reasons for job dissatisfaction were associated with lack of staff motivation, difficulties with bureaucratic administration, poor infrastructure and inadequate supplies and medications and poor in-service training.
3. The main causes of stress for anesthetist were time constraints to perform procedures, medico-legal issue, communication problems and clinical disease.

Increasing salary, providing further educations, recognitions of their profession were among the main suggestions given by these anesthetists to retain them.

## Strengths and Limitations of This Study

The strength of this study is that it has included all levels of nonphysical anesthetists working in Ethiopia and the possible weakness may be the professionals were not sampled from the hospitals but the EAA (Ethiopian anesthetists association) call for participants through regionals representatives of all regional states in Ethiopia and they also choose representative

anesthetists from each institutions/hospitals to participate on the annual conference this may have no effects on this study finding.

## Acknowledgements

The authors are grateful to the respondents who participated in this study and data collectors.

## Acronyms

MDG - Millennium development goals  
 NGOs - Nongovernmental organizations  
 EAA - Ethiopian association of anesthetists  
 CRNA - Certified registered nurse anesthetists

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## References

- [1] Seid Mussa Ahmed\*1, Muluken Tolera 2 and Mulugeta Taken Angamo 3 assessment of job satisfaction among pharmacy professionals in south- west Ethiopia.
- [2] F. Herzberg, B. Mausner, and B. B. Snydermann, *The Motivation to Work*, Jon Wiley & Sons, New York, NY, USA, 2nd edition.
- [3] Mischa W: Motivation and retention of health workers in developing countries; a systematic review. *Biomed central Health service research* 2008; 8(247): 1472-6963.
- [4] Alemshet Yami1, Leja Hamza 1, Alima Hassen 2, Challi Jira 3, Morankar Sudhakar 4 job satisfaction and its determinants among health workers in jimma university specialized hospital, southwest Ethiopia.
- [5] Ewelina Gaszynska, 1 Michal Stankiewicz-Rudnicki, 2 Franciszek Szatko, 1 Andrzej Wieczorek, 2 and Tomasz Gaszynski 3. Life Satisfaction and Work-Related Satisfaction among Anesthesiologists in Poland.
- [6] LINDA THOMPSON, CRNA, MS Job satisfaction of nurse anesthetists Pittsburgh, Pennsylvania.
- [7] Ramesh Kumar\*, Jamil Ahmed, Babar Tasneem Shaikh, Rehan Hafeez and Assad Hafeez. Job satisfaction among public health professionals working in public sector: a cross-sectional study from Pakistan.
- [8] Ambrose Rukewe, Akinola Fatiregun, Adeolu O. Oladunjoye, Olubunmi O. Oladunjoye Job satisfaction among anesthesiologists at a tertiary hospital in Nigeria.
- [9] Dr. Bhagyalakshmi Ramesh, Flat 2D, Nikunjam Retreat, Kumarapuram, Trivandrum, Kerala, India. Job satisfaction and stress levels among anaesthesiologists of south India.
- [10] Kluger MT, Townend K, Laidlaw T. Job satisfaction, stress and burnout in Australian specialist anesthetists. *Anesthesia* 2003; 58:33945.
- [11] M. T. Kluger, 1 K. Townend 2 and T. Laidlaw 3. Job satisfaction, stress and burnout in Australian specialist anesthetists.
- [12] Zewdie Birhanu1, Tsion Assefal1, Mirkuzie Woldie2\*, Sudhakar Morankar1 Determinants of satisfaction with health care provider interactions at health centers in central Ethiopia: a cross-sectional study.
- [13] P. Rama-Maceiras, S. Parente, and P. Kranke, "Job satisfaction, stress and burnout in anesthesia: relevant topics for anaesthesiologists and healthcare managers?" *European Journal of Anaesthesiology*, vol. 29, no. 7, pp. 311–319, 2012.1967.
- [14] Sanjeev Singh1, 3\*, Arti Singh 2, Anbarasu Annamalai 3 and Gaurav Goel 4. Anaesthesiology as a Career Vis-À-Vis Professional Satisfaction in Developing Countries.