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JOB SATISFACTION AND ITS DETERMINANTS AMONG ANESTHETISTS AT
GOVERNMENT HOSPITALS OF ADDIS ABABA, ETHIOPIA,2015

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Job satisfaction and its determinants among anesthetists at governmental hospitals of Addis Ababa, Ethiopia

A research paper to be submitted to Addis Ababa university department of anesthesia in partial fulfillment of the requirements for the degree of Master of Science in anesthesia

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ABSTRACT

Back ground: Job satisfaction is defined by how employees feel about their jobs and different aspects of their jobs. It is a crucial variable used to determine the quality of health-care systems. The work environment for Anesthetists has some unique and stressful ergonomic factors Thus to achieve a higher level of job satisfaction among Anesthetists, it is necessary to identify and improve some essential work climate characteristics.

Objective: To determine the level of job satisfaction of anesthetists working in government hospitals of Addis Ababa and factors affecting their level of satisfaction.

Methodology: Institutional based cross-sectional study design was conducted on 101 anesthetists working in Addis Ababa governmental hospitals from April 1 to May 1, 2015. Simple random sampling method was used to obtain the study participants. Data were collected using a structured questionnaire, and analyzed using SPSS, version 20. Descriptive and inferential statistical analyses were employed. Data were summarized using graphic presentations for the interpretation of findings. Associations for statistical significance were assessed using the 'chi square' test of association. P-values less than 0.05 were considered as statistically significant.

Results: Out of 101 anesthetists who responded for the self administered questionnaire.57% are male and 43% are female. The majority of respondents are below the age of 30 years (58.4%) & more than half (59.4%) of the respondents were single. 53% of the respondents were satisfied and the highest dissatisfaction rate was in the age group of below thirty. There was no association between job satisfaction and socio demographic variables. However, satisfaction in helping others, responsibilities, and freedom to choose method of working were significantly associated with job satisfaction.

Conclusion and recommendations: as the finding of this study 53% anesthetists were satisfied and the major reasons for dissatisfaction were lack of public awareness about the role of anesthetists and low salary. Therefore, improving satisfaction level of anesthetist by solving major reasons of dissatisfaction are strongly recommended.

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ACRONYMS

AAU	Addis Ababa University
ASA	American Society of Anesthesiologist
CRNA	Certified Registered Nurse Anesthetist
EAA	Ethiopian Association of Anesthetists
FMOH	Federal Ministry of Health
GC	Gregorian calendar
PI	Principal Investigator
WHO	World health organization

CHAPTER ONE INTRODUCTION

1.1 BACKGROUND

Job satisfaction is defined by how employees feel about their jobs and different aspects of their jobs.(1) It is one of the important variables in work and organizational psychology, used to determine the quality of health-care systems.(2) Anesthetists share many occupational stressors with other service professionals, but they also experience unique work environment factors that set them apart proximity to suffering and death, the emotional and physical needs of patients, and pressures to perform consistently and optimally under changing conditions and expectations.(3)

Many studies have shown that job satisfaction can be influenced by a wide variety of factors such as competitive pay, a pleasant working environment, opportunities for personal and professional growth, a reasonable workload, supervision, recognition, noticeable progress of patients, positive relationships with co-workers, autonomy on the job, job security, career advancement and contingent rewards.(4-6).

One study demonstrated the importance of job satisfaction to an organization in terms of its positive relationship with individual performance, employee relations, physical and mental health and satisfaction.(7)Thus, more satisfied employees tend to be more productive and creative.(8) The job satisfaction of health professionals has a positive association with patients' satisfaction (9,10)and contributes to the continuity of care.(11)

Conversely, job dissatisfaction has a negative impact on the structure and work flows of organizations. Some negative impacts identified include greater non-conformance with procedures and policies, increases in work accidents, and organizational conflicts, (12) that may increase the rate of medical errors, thus jeopardizing patient safety,(13)and high job turnovers that contribute to the shortages of health-care providers.(14)

Anesthetists have to deal with fatigue, unpredictable work variables, threats of litigation, and the need for sustained vigilance.(15,16) Furthermore, the work environment for anesthetists has some unique and stressful ergonomic factors. These include noise pollution alarms, ventilators, suction apparatus, telephones, and long working hours due to unpredictable surgical procedures, exposure to radiation, and infection, uncomfortable chairs, poorly designed work spaces and lack of necessary monitors.(15,16)

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.(3) Apparently in most Government hospitals of Addis Ababa working conditions are not suitable and necessary monitoring equipment do not exist. Medication and supplies are limited, equipments are reused and there is no strict adherence to infection control procedure. Electric supplies are unreliable, oxygen source inconsistent and very poor ways to scavenge waste anesthetic gases are observed. Most of the time there is only 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 all Working situations could have an impact on the overall satisfaction of Anesthetists. Finding ways to retain anesthetists in the profession to meet the increasing demands of the healthcare system is of paramount importance. Thus to achieve a higher level of job satisfaction among Anesthetists, it is necessary to improve some essential work climate characteristics.

1.2 STATEMENT OF THE PROBLEM

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. Over all job Satisfaction differs in some way among various countries. A Belgian study reported that more than 75% of anesthetists indicated job Satisfaction and Canadian study also reported a high job Satisfaction 70%. In study for anesthesiologists in Mexico the overall satisfaction was 59%. (22)

Factors leading to dissatisfaction of Anesthetists including poor recognition, low anesthesia fee payment, poor facility, long working hours, emotional exhaustion and low level of personal achievement (21). Lack of job satisfaction leads to corresponding increase in perceived level of stress, which may lead to such outcomes as burn out, mental health problems or even suicide attempt (20). Equally important is the linkage of stress with disruption of work performance, including absenteeism, turnover, poor job performance, accident and errors, alcohol and drug abuse. (22,23)

As Federal Ministry of Health report of 2014 in Ethiopia there is a critical 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. (31) These factors could affect the level of satisfaction of anesthetists and has an impact on the service. Anesthesia is highly regarded in the developed world; but in Ethiopia it has just started to be recognized and not much has been investigated about job satisfaction level of anesthetists. By the time of planning this study, there was no research that addressed job satisfaction among anesthetists in Addis Ababa. This study is therefore, aimed at assessing job satisfaction levels among Anesthetists in Addis Ababa and the factors that related with their overall job satisfaction. Accordingly, the study will answer the following research questions

- What is the level of job satisfaction among anesthetists at government hospital of Addis Ababa?
- Which factors influence job satisfaction among anesthetists at government hospital of Addis Ababa?
- What is the association between the socio-demographic characteristics of the anesthetists with job satisfaction?

1.3 SIGNIFICANCE OF THE STUDY

Job satisfaction is very important in improving quality of health care services. Therefore, conducting research on level of job satisfaction and factors affecting will help to identify the need of anesthetist and bring practical changes.

The result of the study can be used by policy makers and program planners to devise different strategies which help to improve areas of job satisfaction of anesthetists.

As there is no published evidence on the overall job satisfaction of anesthetists in our country, it would provide baseline data for future comparison.

CHAPTER TWO

2.1 LITRATURE REVIEW

Several studies have been conducted to find out level of job satisfaction and quantify effect of stressor among Anesthetist. Studies have demonstrated differences in how Anesthetists feel about their jobs. Findings varied, with some research revealing job satisfaction, while others disclosed dissatisfied Anesthetists at different countries.

According to survey of professional satisfaction among Canadian anesthesiologists of 1659 surveys sent, 946 were returned (57% response rate). Seventy-five percent of the respondents were male and 25% female. Staff comprised 91%, residents 9%. The average working week was 59 ± 11.9 hr. Seventy-five percent of respondents reported overall job satisfaction. Job satisfaction was associated with intellectual stimulation, good quality of care and interaction with patients. Dissatisfaction stemmed from treatment from the provincial government, hospital politics and long hours. Job satisfaction was associated with satisfaction with the level of operating room (OR) assistance, perceived high surgical regard and public image. Residents were more satisfied than staff anesthesiologists. Overall satisfaction was not affected by age, gender, region of practice, type of hospital or clinical work.(24)

As a cross sectional survey by Shidhahe et al conducted on Influence of working condition on job satisfaction of Anesthesiologist in India reveals , 78% respondents reported full satisfaction. Female and male anesthesiologist working in teaching hospitals were more satisfied. 49% of respondents were satisfied with assistance in operating rooms; 51% felt they were duly respected by the surgeons and 50% expressed satisfaction with recognition of their services by patients. Two main factor for dissatisfaction were lack of resource/equipment and low recognition of anesthesia service by the patient.(17)

The study of job retention of nurse anesthetists in the Netherlands found that job satisfaction was predicted by work climate and context, and turnover intention was predicted by burnout and job satisfaction .The newer data collected from US CRNAs results mirror the findings on the Netherland's data. For CRNAs in the US, burnout is predicted by both personality and work climate factors; job satisfaction is predicted by work climate and context factors, and turnover is predicted by both burnout and job satisfaction.(25) These results suggest that the work climate and work context have the same impact on job satisfaction, and therefore on turnover intentions, across different health system types, different cultures, and different countries.

According to PirjoLindford's no gender differences existed in job satisfaction among Finland Anesthetists .The figure for often receiving satisfaction from their work was 71%, and the figure for sometimes, was 23%. In the fully adjusted model, job satisfaction in both genders correlated with job control. In men, job satisfaction was also related to organizational justice, and in women to health.(27)

A study done in Pakistani in 2010 showed that a total of 40 Anesthetists were involved. Mean age of the respondents was 41.77 years with a range of 27-69 years. Among the respondents ,21(52.5%) were higher diploma holders,12(30%) were lower diploma holders and 7(17.5%)PG Trainees. 50% of anesthesiologists were fully satisfied with their jobs, the great majority of senior consultant were satisfied as compared to juniors 12(63%) vs.8(38%). 20(50%) of the respondents were satisfied with the working condition in the operating room. Only 12.5% of the respondents were satisfied with the anesthesia fee paid to them. 35(87.5%) of the respondents expressed their dissatisfaction about the public awareness about their role in the operating rooms and health care system.(21)

According to the study conducted in Dutch, it was found that four work context factors; career/rewards, relation with supervisor, task contents and social environment, which are all job resources that explain 48% of variance in work context, which Dutch nurse anesthetists consider important in their job. It is crucial to find the right job resources to effectively buffer specific negative or stressful job demands. these four work context factors serve as the essential buffers for job demands among Dutch nurse anesthetists.(3)

The finding of study by Sanjeev Singh at different hospitals in Ghana revealed that 68% of the respondents were totally satisfied with their job. 29% were just satisfied and 3% anesthesiologists were not satisfied at all. It was found that 82% anesthesiologists working in teaching hospitals and 69% working in community hospitals were fully satisfied with their job. Out of these 47% were male and 53% were female anesthesiologists. 74% junior and 26% senior Anesthesiologists were most satisfied with their job. Female Anesthesiologists are more fully satisfied with their job as compared to male anesthesiologists .Anesthetists working in community hospitals have to work for longer duration of time. They have lesser OR assistance. Most of them are attached to more than one hospital and have to work in different working atmospheres. As against them those working in teaching hospitals have more OR assistants. They have all the opportunities for academic discussion and that should reflect in their overall

better job satisfaction. The study after comparison of Anesthetists working in teaching hospitals with those in community hospitals clearly confirms the above fact. Those working in teaching hospital are more fully satisfied with their job than those working in community hospital.(26)

As Study conducted on job satisfaction among anesthesiologist at a tertiary hospitals in Nigeria showed, overall 59% of the Anesthesiologist were satisfied with their job while 8.7 % were very satisfied, 6.5% were very dissatisfied with their job. The factors identified by respondents were time pressure, long working hours with complaints of insufficient sleep and employment status. a high percentage of participants 54.1% declared that if one change implemented that would enhance their job satisfaction having definite closing time.(28)

A study conducted on health workers in jimma university specialized hospital showed that A total of 145 health professionals have responded for the self administered questionnaire. sixty seven (46.2%) of the health workers are dissatisfied with their job. The major reasons reported for their dissatisfaction were lack of motivation, inadequate salary, insufficient training opportunities and inadequate number of human resources. Only sixty (41.4%) health professionals were satisfied with their job, the major reasons given were getting satisfaction from helping others and professional gratification. Suggestion given by the respondents to improve job satisfaction and increase retention rate included motivation of staff through different incentives such us bonus, house allowance, salary increment, establishing good administration management system and improving hospital facilities and infrastructure.(31)

As the finding of study done on factors associated to Job Satisfaction among healthcare workers at Public Hospitals of West Shoa Zone in Oromia revealed that majority of the respondents were not satisfied with the management system of their respective hospitals. With regard to salary, only 2(1.2%) reported that they were very satisfied whereas 61(36 8%) were very dissatisfied and 58(34.9%) were dissatisfied. Level of satisfaction to coworker relationship indicated that, 17(10.2%) were very satisfied while 30(18.1%) were very dissatisfied and 42(25.4%) were dissatisfied .The overall response of each health workers to the six factors affecting level of job satisfaction was calculated. Accordingly, 58(34.9%) of health workers were satisfied with their job, and 108(65.1%) were not satisfied. (35)

CHAPTER THREE

OBJECTIVES

3.1 General objective

To determine the job satisfaction of anesthetists works in government hospitals of Addis Ababa and factors affecting their level of satisfaction from January 1, 2015 to June 30, 2015.

3.2 Specific objectives

1. To assess the level of job satisfaction among anesthetists.
2. To identify factors associated with job satisfaction of anesthetists.

CHAPTER FOUR

METHODS AND MATERIAL

4.1 Study area

The study was conducted in governmental hospitals of Addis Ababa. Addis Ababa is a capital city of Ethiopia. Thirteen government hospitals are found of which eleven hospitals have functional operating room. Six hospitals are administrated by Addis Ababa Health Bureau which includes ,Ras Desta Damtew, Zewditu, Yekatit 12, Minilik ,Ghandi Memorial and Tirunesh Bejing while the remaining five hospitals are under the control of federal government. The total number of anesthetists who work in these hospitals were 150.

4.2 Study period

The study was conducted from April 1, 2015 to May 1, 2015.

4.3 Study design

Institution based cross-sectional study design was conducted.

4.4 Population

4.4.1 Source population

All anesthetists who are working at government hospitals of Addis Ababa.

4.4.2 Study population

Selected Anesthetists who are working at governmental hospitals of Addis Ababa during data collection period.

4.4.3 Exclusion criteria

The exclusion criteria were those who were not available such as those who were on leave and those who refused to participate.

4.5 Sample size and sampling technique

4.5.1 Sample size- The sample size was determined by using single proportion formula with the following assumptions;

Confidence level (CI) -95,

Proportion (P) -50 %

Marginal of error (d) - 5%

Sample size is computed based on single proportion formula assuming $p = q = 0.5$ since there was no research has been conducted on this topic in Ethiopia

$$n = \frac{z^2 p (1-p)}{d^2} \quad n = \frac{(1.96)^2 \times (0.5) (1-0.5)}{(0.05)^2} = 384.16$$

So with adjustment for non-response (10% contingency) $n = (384+38)$, the final sample size was 422.

By using correction formula, $n_{final} = \frac{n}{1 + \frac{n}{N}}$, $n_{final} = \frac{422}{1 + \frac{422}{150}}$, = **110** is the final number of anesthetists who was included in the study.

4.5.2 Sampling technique

All governmental hospitals found in Addis Ababa was included in the study then all anesthesia professionals names 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.

4.6 Study variables

4.6.1 Depended variables

- Job satisfaction

4.6.2 Independent variables

- Age
- Sex
- Marital status
- Educational qualification
- Income
- Working hour
- Service year
- Recognition of anesthesia service
- Availability of resource and supplies
- Physical working environment
- communication with surgeon
- Availability of assistance

4.7 Data collection tool and procedure

A structured self-administered questionnaire was used to collect data. The questionnaires comprised two main parts; demography and job satisfaction. Demography included gender, marital status, age, educational qualification, service year, working hour, and type of hospital. Job satisfaction partly consisted of 18 factors, such as satisfaction with physical working

conditions, salary, promotional opportunities, workload, availability of assistance additional remuneration, responsibilities, and others. For each factor, a respondent can choose from a six-point Likert scale which representing various 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 developed from a published study by Okaro in 2010(30) with some modification. The period of data collection was four weeks a random sample of 101 participants was drawn from the all hospitals. The data was collected by 12 under graduate anesthesia students.

4.8 Data quality assurance

To ensure content validity of the instrument, 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.

4.9 Data processing, analysis and interpretation

Once the data have been collected and checked for completeness and accuracy, it was sorted, categorized and summarized. After coding the data it was entered, and analyzed by using SPSS version 20. Descriptive and inferential statistical analyses were employed. Data was summarized using graphic presentations for the interpretation of findings. Descriptive Statistics, percentages frequencies, mean and standard deviation were computed. Association between socio-demographic characteristics and job satisfaction, as well as comparison of overall level of job satisfaction with each factors of satisfaction were 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. The overall levels of job satisfaction among anesthetists was classified as being dissatisfied if the sum of the scores for the different factors is between 18–54, while 55–72 is moderate and 73–108 is satisfied.

4.10 Ethical Consideration

After approval of proposal, a letter of support and permission was obtained from the ethical committee of the College of health science of Addis Ababa University 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. We don't write the name of the participants so that information obtained was kept confidential.

4.11 Operational Definition

Overall satisfaction: In this study Overall satisfaction refers to 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.

Likert scale: The sum of response to several Likert items.

Likert items: The statement that the respondents are asked to evaluate in the survey

4.12 Limitation of the study

- Items on the questionnaire were developed for use in other health professionals and were not specially designed for anesthetists and modifications were made.
- The findings of the study may not be generalized to anesthetists who are working in private hospitals, as the different environment and circumstances existing in private hospitals may impact on job satisfaction.

CHAPTER FIVE RESULTS

Socio-demographic-characteristics

Table 1 shows distribution of respondents by their socio demographic characteristics. A total of 101 anesthetists have responded for the self administered questionnaire. Out of 101 respondents who were included in this study, 57% are male and 43% are female. The majority of respondents are below the age of 30 years (58.4%), 21.8% of them are between 31 and 40 years. More than half (59.4%) of the respondents were single. Regarding the work experience the greatest number of employees have service year between 1-5 years (53%). These data show that there is domination of younger employees. With regard to educational qualification, 19.8% of the participants were in possession of diploma while 71.3% had BSC degree and the remaining (9%) had MSC. The larger proportions were working in teaching hospitals (73.3%) while 37% of the participants had a part time job. The respondents who are working 51-60 hrs per week accounted for (37%). Table 1: socio-demographic characteristics of respondents at government hospitals in Addis Ababa from April 1, 2015 - May 1, 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 the Anesthetists were satisfied with five factors, 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. According to the mean score of each the anesthetists were dissatisfied with the remaining twelve 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 education 2.62±1.248), and workload 2.80 ±1.319), respectively.

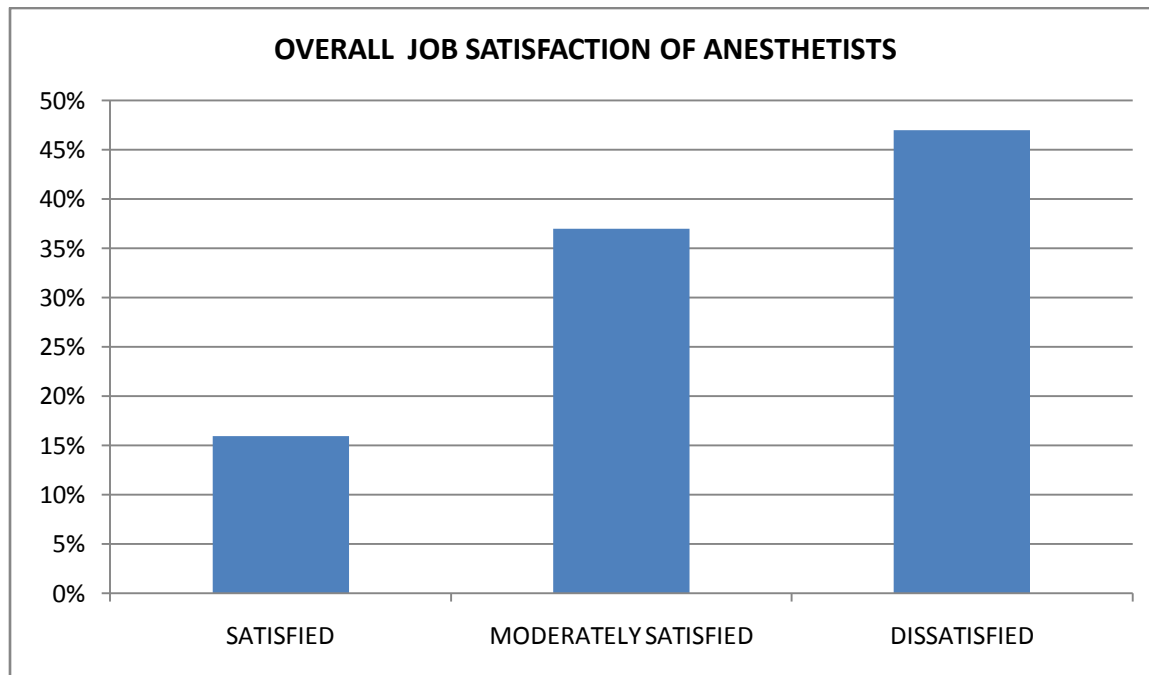
Table 2: Job satisfaction for each factor of anesthetists working at government hospitals in Addis Ababa from April 1, 2015 - May 1, 2015.

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 shown on figure below the overall level of job satisfaction among anesthetists from the total participant 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.



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 1, 2015 - May 1, 2015.

Variables		Level of satisfaction		P-value
		Satisfied n (%)	Dissatisfied n (%)	
Gender	Male	38(65.5)	20(34.5)	.146
	Female	22(51.2)	21(48.8)	
Age (Years)	≤ 30	33(55)	27(45)	.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)	.381
	Married	25(62.5)	15(37.5)	
Work experience (years)	<1	7(63.6)	4(36.3)	.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)	.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)	.581
	No	38(59.3)	26(40.7)	
working hours per week	≤ 50	12(75)	4(25)	.100
	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)	.111
	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 working at government hospitals in Addis Ababa from April 1, 2015 - May 1, 2015.

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	0.000
		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	

CHAPTER SIX

DISCUSSION

The finding of this study indicated 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.(28) 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 .(33)

In this study, majority of the respondents (47%) 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 consistent with the finding of a study done in 2010 in Pakistan on job satisfaction among anesthesiologists in whom the respondents reported 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. (21)

The commonest reasons given for job satisfaction according to this study were the patient outcome (78%), helping others (75%) ,providing good qualities of care (64%)and general feeling about the job ,That agrees with the findings of Singh et al.who reported that anesthetists appreciated the good quality of patient care and intellectual stimulation as well as enjoyed the interaction with anesthesia colleagues and magic of anesthesia.(26)It is also consistent with the findings of the study done in Canada in which job satisfaction among anesthesiologists is significantly associated with intellectual stimulation, quality of care and interaction with the patients.(24)

Dissatisfaction with one's salary in this study seems to be a common issue that is also evident on study done by Alemshet Y. et al as inadequate salary was one of the reasons of

dissatisfaction reported by the respondents.(29) In contrast, that does not seem to be a problem in Canada as evidenced by survey of 2001. That discrepancy may be due to differences in the economic status of the health-care system.(24)

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 they adapted to their work environment. That 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.(21)

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.(26) It is also consistent 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.(18)

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.(34) In this study, perception of surgical attitudes toward anesthetists significantly affected overall job satisfaction. This finding is consistent with the study done in Canada in which low proportion of anesthesiologists felt highly regarded by their surgical colleagues.(24)

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

In conclusion the finding of this study indicated that 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 played by anesthetists, inadequate salary, lack of promotion, insufficient resources and supplies and poor physical working place conditions .From the findings, I concluded that the main factors that are associated with their overall job satisfaction were satisfaction in helping others, responsibilities, freedom to choose method of working, and enjoy status as a health care professional.

RECOMMENDATION

Based upon the result of this study following recommendations can be drawn;

- Anesthetists should create awareness for the society regarding the field anesthesia and the role played by anesthetists in patient care so that the patients and another health care provider can have an understanding on the care given by anesthetists.
- EAA should facilitate and offer up-to-date training for all anesthetists.
- Hospitals should improve the physical working environments, avail the necessary resource and supplies that are useful for health care delivery services and provide

- assistant for anesthetists which in turn helps to improve satisfaction level of anesthetists.
- Ministry of education should give opportunities for anesthetists to upgrade their level of educational which helps to reduce low induction in the field and high turnover intention.
 - Ministry of health should pay adequate amount of remuneration for professional hazards.
 - Researchers are recommended to conduct further study on factors associated with satisfaction both in private and gov't hospital as there may be a difference in level of job satisfaction and also to include qualitative research supplementing quantitative one so that it can be possible to get additional areas of job satisfaction.

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ANNEXI FRAMEWORK OF THE STUDY

Socio-demographic chx

- Age
- Gender
- Year of service
- Professional level

Future career
Training (short and long-term)



**ANNEX II
QUESTIONNAIRES**

**ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
DEPARTMENT OF ANESTHESIA**

This questionnaire is designed to gather data on " Job satisfaction of Anesthetists and associated factors in government hospitals of Addis Ababa". The data to be collected through this questionnaire is highly valuable to meet the objectives of this study. Therefore, you are kindly requested to fill in and return the questionnaire. The information you supply would be kept confidential and do not write your name on the questionnaire.

Thank you in advance

Part I Socio-demographic characteristics of the respondents

- 1. Sex Male Female
- 2. Age ≤30 31-40 ≥ 41
- 3. Marital status..... Single Married
- 4. Service year..... <1 1- 5 6-10 >10
- 5. Educational qualification..... Diploma BSC MSC
- 6. Do you have a part time job in private hospitals Yes No

- 7. During an average week how many hours you spend in the OR approximately.....
<50 hrs 51-60 hrs 61-70 hrs 71-80 hrs >81 hrs

- 8. Type of hospital you are working in..... Teaching Community

Part II Job Satisfaction

Instruction: The following are assessing your level of satisfaction on listed factors of job characteristics. Please, provide appropriate responses using tick “√” mark in front of the corresponding items.

Key: 1=very dissatisfied, 2=dissatisfied, 3=somewhat dissatisfied, 4=somewhat satisfied, 5=satisfied and 6=very satisfied

No	Factors of job Satisfaction How satisfied or dissatisfied are you with	Level of satisfaction					
		1	2	3	4	5	6
1	The availability of resource and supplies						
2	Helping others						
3	Surgeons' attitudes towards anesthesia						
4	Public awareness about the role of anesthetists						
5	Opportunities for advancement						
6	Opportunity for training or education						
7	Salary						
8	Workload						
9	Providing good quality of patient care						
10	Patient outcome						
11	The amount of responsibilities you are given						
12	Physical working place conditions						
13	The assistance you have in operating room						
14	The freedom to choose your own method of working						
15	your status as a healthcare professional						
16	The recognition you get for good work						
17	Remunerations for professional hazard						
18	your feeling about job itself						

ANNEX III

Participant Information Sheet

Job satisfaction and its determinants among Anesthetists at Government Hospitals of Addis Ababa, Ethiopia.

My name is Blen Kassahun and I am conducting this thesis as am a student of the post graduate programme at Addis Ababa university, college of health science department of anesthesia.

The purpose of this study is to determine the job satisfaction of Anesthetists working in government hospitals of Addis Ababa and factors affecting their level of satisfaction.

You have been approached because the study requires information from Anesthetists who are working at government hospitals of Addis Ababa, and it's completely up to you to decide whether or not you take part in the study.

If you decide you would like to take part, you would be asked to fill questionnaires which contain the socio-demographic data and the job satisfaction part measured with likert scale.

The information you provide is confidential The data collected for this study will be stored securely and only the researchers conducting this study will have access to this data: Hard copies of questionnaires will be kept in a locked cabinet. The files on the computer will be encrypted (that is no-one other than the researcher will be able to access them) and the computer itself password protected. up to the end of the study, hard copies of questionnaires will be kept securely & at the end of this period, they will be destroyed.

The results will be summarized and reported and may be submitted for publication in an academic or professional journal.

There are no risks anticipated with participating in this study. However, if you experience any distress following participation you are encouraged to inform the researcher or data collectors. Although you may find participating interesting, there are no direct benefits in taking part.

This study has been reviewed and approved by Ethics Committee of college of Health science and department of anesthesia.

If you have any questions about the study, please contact the main researcher:

Address- blenkas2000@yahoo.com/ bilenk.k4@gmail.com

Thank you for taking the time to read this information sheet.

ANNEX IV

Consent Form

Name of department: Anesthesia

Title of the study: Job satisfaction and its determinants among Anesthetists at Government Hospitals of Addis Ababa, Ethiopia

- I confirm that I have read and understood the information sheet for the above thesis and the researcher has answered any queries to my satisfaction.
- I understand that my participation is voluntary and that I am free to withdraw from the research at any time, up to the point of completion, without having to give a reason and without any consequences. If I exercise my right to withdraw and I don't want my data to be used, any data which have been collected from me will be destroyed.
- I understand that I can withdraw from the study any personal data (i.e. data which identify me personally) at any time.
- I understand that data which do not identify me personally cannot be withdrawn once they have been included in the study.
- I understand that any information recorded in the investigation will remain confidential and no information that identifies me will be made publicly available.
- I consent to being a participant in the project

Name of participant _____

Signature _____

Date _____

ASSURANCE OF PRINCIPAL INVESTIGATOR

The undersigned agrees to accept responsibility for the scientific ethical

and technical Conduct of the research project and for provision of required progress reports as Per terms and conditions of the Research Publications Office in effect at the time of Grant is forwarded as the result of this application.

Name of the student: Blen Kassahun

Date. July 2015 Signature _____

Approval of the primary Advisor

Name of the primary advisor: Leulayehu Akalu

Date. July ,2015 Signature _____