

# International Journal of Sciences: Basic and Applied Research (IJSBAR)

Sciences:
Basic and Applied
Research
ISSN 2307-4531
(Print & Online)
Published by:
ISSN 2307-4531

**ISSN 2307-4531** (Print & Online)

http://gssrr.org/index.php?journal=JournalOfBasicAndApplied

Quality of Perioperative Informations Provided and it's
Associated Factors Among Adult Patients Who Undergone
Surgery in Public Hospitals of Gamo &Gofa Zones: A

Mixed Design Study, Southern Ethiopia, 2019

Genet Asefa Alito<sup>a\*</sup>, Wubshet Estifanos Madebo<sup>b</sup>, Nega Chufamo Eromo<sup>c</sup>

<sup>a,b</sup>School of Nursing ,Arba Minch University, 21,Arba Minch, Ethiopia <sup>c</sup>School of Medicine , Arba Minch University,21, Arba Minch, Ethiopia

<sup>a</sup>Email: genet.Shalom@gmail.com <sup>b</sup>Email: estifo.wubshet@gmail.com <sup>c</sup>Email: negachufa@yahoo.com

## **Abstract**

**Background:** Surgery is one of biggest health related decisions done in one's life with an outcome ranging in both extremes. It do have three phases. Preoperative, Intraoperative and Postoperative phases. All the phases are interlinked and affect one another. Surgical outcomes are found to be affected by range of factors. Some of the factors could be social, financial, medical, immunological, and etc. Surgery as a professional procedure, is bound with multiples of concerns including clinical, professional, moral, Ethical and legal aspects. Appropriate health informations are an indispensable component of health care as well as surgery. Noting is known about the quality of perioperative informations provided in Public Hospitals of Gamo and Gofa Zones. Therefore, the purpose of this study will be to assess the quality of perioperative informations provided and its associated factors among adult patients who undergone surgery in public hospitals of Gamo and Gofa Zones.

**Method and materials:** A facility based mixed design study was conducted from March-April 2019 in Arba minch, Chencha and Sawla Hospitals, Southern Ethiopia.


st Corresponding author.

A simple random sampling technique was employed to select 410 study participants among admitted adult patients who undergone surgery. Bivariate logistic regression analysis was done to identify candidates for multivariable logistic regression analysis. Explanatory variables with a p-value of less than 0.25 in the bivariate logistic regression analysis were included in the initial logistic model of multivariable logistic regression. Finally, statistically significant associations of variables were determined based on an Adjusted Odds ratio with 95% confidence interval and p-value <0.05.

**Result:** the proportion of patients who received good quality perioperative informations are only 36.6%. In the multivariable analysis; Frequency of Hospital Visit [AOR=2.604, 95% CI: 1.669-4.063], Reasons for Hospital Visit [AOR = 2.370; 95% CI: 1.356-4.144], Previous Surgery [AOR = 2.370; 95% CI: 1.449-3.876], number of Previous Surgery [AOR = 1.808; 95% CI: 1.097-2.981], Place of Surgery[AOR =0.333; 95% CI:0.152-0.726], Surgical Professional [AOR =2.007; 95% CI:1.096-3.677] and Consenter [AOR =7.408; 95% CI:4.453-12.325] were significantly associated with the provision of good quality perioperative informations. **Conclusion:** According to this study, the proportion of patients who received good quality perioperative informations are only 36.6%. Therefore, all the concerned bodies must strive to improve the quality of informations to adult surgical patients.

**Key words:** Quality; Perioperative Informations; Adult Surgical Patients.

#### 1. Introduction

Surgery is one of biggest health related decisions done in one's life with an outcome ranging in various extremes. It does have three phases. Preoperative, Intraoperative and Postoperative phases. All the phases are interlinked and affect one another. Surgical outcomes are found to be affected by range of factors. Some of the factors could be social, financial, medical, immunological, and etc. Surgery as a professional procedure, is bound with multiples of concerns including clinical, professional, moral, Ethical and legal aspects. Appropriate health informations are an indispensable component of health care as well as surgery [1, 3]. Surgery is an intervention done to variety of emergency, acute and chronic health conditions. On top of that, Surgery is an interdisciplinary procedure aimed at saving life, enhancing quality of life and increasing life expectancy. Nurses as a Clinician play a big role in making holistic assessment and providing procedure specific quality perioperative informations for all surgical patients. Many researches have been conducted on this area. In an study conducted in Gondar specialized and teaching hospital, patient satisfaction with the perioperative service and information provision is found to be 50.1% [4]. Provision of quality perioperative informations is very irreplaceable for ensuring best surgical outcomes. As per different studies, there is a great demand for information on surgical concerns by patients as there is surgery related ambiguity, anxiety and fear among the patients. However, little is clearly known about the quality and content of perioperative informations provided to surgical patients [5,13]. Surgical Patients who require perioperative informations as part of their care have the right to expect and get that sufficient information available to meet their needs and ensure best possible surgical process and outcomes. However, many patients still face varied problems related with an unmet need for perioperative informational needs especially in the health facilities of developing countries. The timely provision of appropriate perioperative informations is very necessary and critical. But in many developing and

transitional countries there is a widespread shortfall between perioperative informational needs and the actual informations provided [6,11]. Patient education and appropriate provision of timely information allows a more facilitated care process with a more satisfying outcome. In addition, it will help the patient gain the necessary knowledge of the treatment and all associated factors he/she is concerned. Therefore, providing a good quality perioperative informations to a patient undergoing a surgery is of a super importance [4,27]. Despite all that big effort, there is still a significant gap between appropriate perioperative informational needs and the informations provided which can improve and determine surgical outcomes[1,11] Provision of Perioperative informations play a great role in surgical outcomes. It also reduces some surgery related perioperative anxiety and enhances psychological readiness for the procedure to be performed [5]. There is a high demand for perioperative qualitative, quantitative and holistic informations concerning the surgery ahead. But the informations provided are too specific, unstructured and insufficient in meeting the informational needs of the surgical patients. Thus, the health outcomes of the surgery will be too much compromised because of lack of adequate and timely perioperative informations[1,5,11]. According to different studies so far, the negative outcomes associated with inadequate and untimely provision of perioperative informations could be delayed wound healing, surgical site infections, reoperation, wound dehiscence, massive bleeding after surgery and etc. As per an study conducted in Jimma University specialized teaching hospital, patients lacking adequate preoperative informations (16.4%) faced a greater postoperative pain (39.1%) [1,3,4,5,13]. Thus, surgery if not handled with appropriate perioperative information and follow-up well, it can compromise the professional aspect, quality of life, affect resources like time and finance, bring psychological pain and finally cost the life of an individual if not seriously and urgently managed which is the biggest loss we can ever face [5]. Nothing is known about the quality of perioperative informations provided in Public Hospitals of Gamo and Gofa Zones. Therefore, the purpose of this study will be to assess the quality of perioperative informations provided and its associated factors among adult patients who undergone surgery in public hospitals of Gamo and Gofa Zones.

## 2. Materials and Methods

## 2.1. Study area, design and period

This study was conducted in Arba minch, Chencha and Sawla towns, Southern Ethiopia. Arba minch town is located 495 km South of Addis Ababa and 260km away from Hawassa (i.e. the capital of the SNNPR), Chencha is located 540km south of Addis Ababa and 300km away from Hawassa while Sawla is located 560 km South of Addis Ababa and 250 km away from Hawassa. A facility based mixed design study was conducted from March-April 2019 in Arba minch, Chencha and Sawla Hospitals, Southern Ethiopia.

## 2.2. Population, Sampling Determination and Sampling Procedure

The source population for this study were all adult patients who undergone surgery in public hospitals of Gamo & Gofa Zones. Adult patients who undergone surgery in public hospitals of Gamo & Gofa zones fulfilling the inclusion criteria were the study population. The sample size was calculated by using single proportion formula where Z was 1.96,P 0.5(50%) as I did not get research purely on quality of perioperative informations, margin of error was 5% and confidence interval at 95% level. Finally, the sample size for this study was 422

with 10% of Nonresponse rate added to the calculated amount. All the three Hospitals in Gamo and Gofa Zones were included. All adult (minor-major, outpatient-inpatient, elective- emergency and obstetrics- gynecology patients who were operated in public hospitals of Gamo and Gofa Zones during the data collection period were included. The total number of surgeries done in all areas and types per month in the respective hospitals was considered and the required number of cases' distribution was allocated proportionally. Systematic random sampling method was employed. Patients who were critically ill at the time of data collection were excluded from this study.

## 2.3. Variables of the study and Operational definitions

The quality of Perioperative informations provided to adult surgical patients is an outcome variable of this study. The Independent Variables include; Sociodemographic Characteristics (Age, sex, marital status,...) and Clinical Characteristics of the patient (Previous surgery, Reason for Hospital visit,...) Facility Based Factors(Policies, guidelines), Professional Factors (Work overload, Knowledge) and Social Factors (Language barrier) in the side of the professional were assessed by interviewing key informants.

## **Operational Definitions**

Health care professional: Is an individual that provides preventive, curative, promotional or rehabilitative health care services for individuals or community.

Public Hospital: Government or NGO supported health facility providing curative, preventive, promotional and/or rehabilitative services to the population.

Perioperative Information: promotive, curative and rehabilitative health information provided in the preoperative, intraoperative and postoperative phases of operation.

Quality: "User based quality is defined as "fitness for use", which means the consumer's perception of quality. It is also defined as meeting the desires and expectations of customers" [1,4].

Good Quality: A receipt of more than 75% of the perioperative informations necessary for a patient [24].

Surgical patients: all adult minor-major, outpatient inpatient, elective -emergency surgery and obs-gyn (obstetrics, gynecology,) patients who operated during the study period[1,4].

## 2.4. Data collection methods and tools

Structured, Amharic version questionnaire was used to collect the quantitative data and focused group discussions were conducted among concerned health professionals on institutional, professional and social factors that affect the quality of perioperative information. The purpose and nature of the interview was explained. The questionnaire was first prepared in English and then translated to Amharic by different qualified individuals. All the questions on the quantitative aspect were close ended. The questionnaire was developed

from different literatures and had three sections: socio demographic section (age, sex, education, occupation, and marital status), a section about general clinical Characterstics and section on perioperative informations provided for the specific surgery the study participants had undergone. A pre-tested, structured, Amharic version questionnaire was used to interview patients within 24 hours after operation ensuring they were fully awake. Trained data collectors involved in the quantitative data collection process. The focused group discussions were conducted by the investigators.

## 2.5. Data Processing and Analysis

After the data are fully entered to Epi-info version 3.5.1, data were analyzed using SPSS version 22.0. Categorical variables were summarized as numbers and percentages, where as normally distributed continuous variables were presented as means and standard deviations. To identify factors associated with the outcome variable; Quality of perioperative informations provided, first a bivariate logistic regression analysis was performed for each independent variable. Then, significant variables observed (those with p-value less than 0.25) in the bivariate logistic regression analysis were subsequently included in the multivariate logistic regression model to determine the independent predictors for the outcome variable among the study participants. Associations were considered statistically significant for variables with p value less than 0.05. For the qualitative part, the data were prescribed, thematized and narrated.

#### 3. Results

## 3.1. Sociodemographic characteristics

The response rate of this study was 97.1% comprising a total of 410 study participants.12 study participants were excluded from this study due to refusal to participate. In this study, there were 287(70%) rural residents.Majority,54.4% of the respondents' age is between 18&33.The mean and standard deviations of the variable age are 34.95 and  $\pm 11.802$  respectively. Most (52.4%) of the study participants were females in this study. In relation to their marital status, about 349(85.2%) were married. More than half, (58.5%) of them were protestants by religion. In terms of job/occupation, 114(27.8%) were farmers. The majority, (72.9%) ethnic classification of the respondents was Gamo ethnic group. Coming to respondents' educational status; about one third, (30.28%) of the respondents were educated in primary schools. Among the respondents who were interviewed for their monthly income; the majority, 144(35.1%) had an average monthly income more than 1500 Ethiopian Birr. (Table 1)

**Table 1:** Frequency distribution of Sociodemographic characteristics of Adult Surgical patients at Arba Minch General, Chencha District and Sawla General Hospitals, Southern Ethiopia, 2019

Variable	Category	Frequency	Percent	Receipt of information	perioperative
				Good Quality	Poor Quality
1.Residence	1.Urban	123	30	46(11.2)	77(18.7)
	2.Rural	287	70	104(25.3)	183(44.6)
2.Age	1.18-33	223	54.4	73(17.8)	150(36.5)
_	2.34-49	135	32.9	59(14.3)	76(18.5)
	3.50-80	52	12.7	18(4.3)	34(8.29)
3.Sex	1.Male	195	47.6	59(14.3)	136(33.1)
	2.Female	215	52.4	91(22.1)	124(30.2)
4.Marital status	1.Single	61	14.8	17(4.14)	44(10.73)
	2.Married	349	85.2	133(32.4)	216(52.6)
5.Religion	1.Orthodox	154	37.5	60(14.6)	94(22.9)
-	2.Protestant	240	58.5	82(20)	158(38.5)
	3.Muslim	16	4	8(1.95)	8(1.95)
6.Occupation	1.Civil servant	64	15.6	25(6.09)	39(9.51)
-	2.Merchant	76	18.5	29(7.07)	47(11.46)
	3.Daily	51	12.5	14(3.41)	37(9.02)
	Labourer				
	4.House wife	105	25.6	45(10.97)	60(14.63)
	5.Farmer	114	27.8	37(9.02)	77(18.7)
7.Ethinicity	1.Gamo	299	72.9	114(27.8)	185(45.1)
·	2.Welayita	21	13.7	4(0.97)	17(4.14)
	3.Konso	34	8.3	17(4.14)	17(4.14)
	4.Guragie	56	5.1	15(3.65)	41(10)
8.Educational status	1.No formal	120	29.32	76(18.53)	44(10.73)
	education				
	2.Religious	12	2.9	8(1.94)	4(0.97)
	education				
	3.Primary	124	30.28	73(17.8)	51(12.4)
	education				
	4.Secondary	81	19.8	57(13.9)	24(5.85)
	education				
	5.Teritiary	73	17.7	46(11.2)	27(6.58)
	Education				
9.Monthly income in	1.0-500	170	41.5	66(16.09)	104(25.3)
Ethiopian Birr	2. 501-1000	45	11.0	5(1.21)	40(9.75)
	3.1001-1500	51	12.4	19(4.63)	32(7.8)
	4. >1500	144	35.1	60(14.63)	84(20.48)

#### 3.2. Clinical Characterstics

In this study; more than half,(57.1%) of the respondents had visited Hospital for first time with a major reason(80.7%) being illness. Coming to the duration of illness,47.5% of the respondents had been sick just for a week. Most(76.3%) of the study participants had no previous surgery. According to the data from this study, 373(91%) of the respondents had undergone a major surgery. General Hospitals had been the facilities for most, (91%) of the surgeries with the major (81.5%) involvement of General Surgeons. More than one third, (42.4%) of the surgical patients were consented by a Nurse with majority of the consenting (52.2%) done immediately before the surgery. (Table 2)

**Table 2:** Clinical Characterstics of Adult Surgical patients at Arba Minch General, Chencha District and Sawla General Hospitals, Southern Ethiopia, 2019

Variable	Category	Frequency	Percent	Receipt of perioperative	
				Informations	
				Good Quality	Poor Quality
1.Frequency of Hospital Visit	1.One visit	234	57.1	61(14.8%)	173(42.1)
	2.Two&more visits	176	42.9	89(21.7)	87(21.2)
2.Reasons for Hospital Visit	Follow up	79	19.3	47(11.46)	32(7.8)
	Illness	331	80.7	103(25.1)	228(55.6)
3.Duration of Illness	1.A week	195	47.5	78(19.02)	117(28.5)
	2.Two weeks	102	24.9	37(9.02)	65(15.8)
	3.Three&more	113	27.6	35(8.5)	78(19.02)
	weeks				
4.Previous Surgery	1.Yes	97	23.7	55(13.41)	42(10.24)
	2.No	313	76.3	95(23.1)	218(53.1)
5.Number of previous	0	302	73.8	91(22.1)	212(51.7)
surgeries	<u>≥</u> 1	108	26.4	59(14.3)	48(11.7)
6.Type of current Surgery	1.Minor	37	9	19(4.63)	16(3.9)
	2.Major	373	91	131(31.9)	244(59.5)
7.Place of the current	1.District Hospital	37	9	23(5.6)	14(3.41)
Surgery	2.General Hospital	373	91	127(30.9)	246(60)
8. Who did the current	1.IEOS	76	18.5	22(5.36)	54(13.1)
Surgery?					
	2.General Surgeon	334	81.5	128(31.2)	206(50.2)
9 .Consenter	1.A Nurse	238	58	127(30.88)	111(27.07)
	2.A health	172	42	23(5.6)	149(36.3)
	professional				
10.Time of Consenting	1.Long Before the	196	47.8	63(15.3)	133(32.4)
	Surgery				
	2.Immediately	214	52.2	87(21.21)	127(30.97)
	Before the Surgery				

# 3.3. Perioperative informations provided to Adult patients who undergone surgery

**Table 3:** Perioperative informations provided to Adult Surgical patients at Arba Minch General, Chencha District and Sawla General Hospitals, Southern Ethiopia, 2019

Variable	Category	Frequency	Percent
		1 0	
1.Knew reason for the surgery	Yes	407	99.3
<u> </u>	No	3	0.7
2.Consented for the surgery	Yes	404	98.5
	No	6	1.5
3.Did you receive Preoperative Informations before getting	Yes	326	79.5
consented?	No	84	20.5
4. Way of Consenting	Oral	51	12.4
	Written	359	87.6
5.Did you receive adequate informations by the OR Nurses?	Yes	322	78.5
	No	88	21.5
6. Were the OR Nurses attentive to your questions?	Yes	358	87.3
	No	52	12.7
7. Did the Nurses give explanation to your complaints like	Yes	210	51.2
pain or nausea?	No	200	48.8
8. Did the Nurses' provide prompt response for your call?	Yes	329	80.2
	No	81	19.8
9. Did the Ward Nurses communicate respectfully to you?	Yes	354	86.3
	No	56	13.7
10. Did the ward Nurses Respond appropriately to your	Yes	321	78.3
health progress?	No	89	21.7
11. Did You receive information about the importance of	Yes	311	75.9
investigations?	No	99	24.1
12. Did the Ward nurses inform about the side effects of	Yes	149	36.3
medications?	No	261	63.7
13.Did the ward Nurses spend Adequate time with you	Yes	314	76.6
during evaluation and treatment?	No	96	23.4
14. Did the ward Nurses provide information about risk of	Yes	73	17.8
sore throat & treatment options after operation?	No	337	82.2
15.Did the ward Nurses provide Information about the risk of	Yes	112	27.3
depression?	No	298	72.7
16. Did the ward Nurses provide Information on the risk of	Yes	142	34.6
discomfort and relieving methods after operation?	No	268	65.4
17. Did the ward Nurses provide Information on the risks of	Yes	201	49
hunger and thirst after operation?	No	209	51
18. Did the ward Nurses provide Information on the risk of	Yes	143	34.9
bleeding and treatment options after operation?	No	267	65.1
19. Did the ward Nurses provide information on the risks of	Yes	88	21.5
reoperation and death after operation?	No	322	78.5
20. Have you been Clear with all the informations provided	Yes	407	99.3
?	No	3	0.7

## 3.4. Quality of Perioperative informations

Quality of perioperative informations provided to adult surgical patients is declared good or poor after assessing the receipt of the minimum acceptable components of perioperative(preoperative, intraoperative and postoperative informations) by an appropriate professional. There are twenty different questions assessing the informational provision by the Health professional. For the perioperative information provided to be categorized as good quality, the Surgical patient must receive a minimum of 75%(15 out of 20 questions) by a health professional. As a result, only 150(36.6%) of the respondents had received perioperative informations of

## minimally good quality [24].

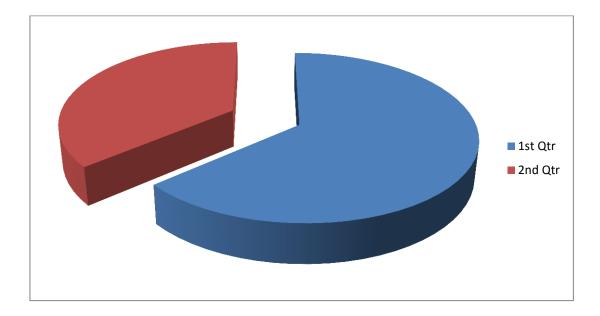


Figure 1: The quality of perioperative informations provided classified as Good quality and poor quality.

# 3.5. Factors associated with Quality of Perioperative informations

After running the Bivariable and Multivariable analysis for identifying factors associated with the quality of perioperative informations provided to adult surgical patients; frequency of Hospital visit, reasons for Hospital visit, previous surgery, number/s of previous surgery, place of the surgery, the type of professional who performed the specific surgery and the type of professional who made the consenting are the variables found to be associated with the quality of perioperative informations. (Table 4)

**Table 4:** Bivariable and multivariable logistic regression analysis results for factors associated with Quality of Perioperative informations provided to Adult Surgical patients at Arba Minch General, Chencha District and Sawla General Hospitals, Southern Ethiopia, 2019

Variables	Receipt of perioperative	Quality	COR (95% C1)	AOR (95% CI)	P-value	
	Informations					
	Yes	No				
1.Respondents' Sex						
Male	59(14.3%)	136(33.1%)	0.591(0.393-0.889)	0.834(0.533-1.307)	0.429	
Female	91(22.1%)	124(30.2%)	1	1		
2.Respondents' Freque	ency of Hospital	Visit			1	
1	61(14.87)	173(42.1)	1	1		
≥ 2	89(21.7)	87(21.2)	0.345(0.228-0.522)	2.604(1.669-4.063)	0.000**	
3.Respondents' Reason	s for Hospital v	isit				
Follow up	47(11.46)	32(7.8)	3.251(1.960-5.392)	2.370(1.356-4.144)	0.002**	
Illness	103(25.1)	228(55.6)	1	1		
4.Respondents' Previou	us Surgery		I			
Yes	55(13.41)	42(10.24)	3.005( 1.881-4.800)	2.370(1.449-3.876)	0.001**	
No	95(23.1)	218(53.1)	1	1		
5.Respondents' Number	er of previous Su	ırgeries				
0	91(22.1)	212(51.7)	1	1		
≥1	59(14.38)	48(11.7)	0.349(0.222-0.549)	1.808(1.097-2.981)	0.020**	
6.Respondents' Place o	f Surgery					
District Hospital	23(5.6)	14(3.41)	1	1		
General Hospital	127(30.9)	246(60)	3.182(1.583-6.396)	0.333(0.152-0.726)	0.006**	
7. Respondents' Surgic	al Professional					
IEOS	22(5.36)	54(13.13)	1	1		
General Surgeon	128(31.2)	206(50.24)	0.671(0.390-1.156)	2.007(1.096-3.677)	0.024**	
8. Respondents' Conse	nter		I	I	ı	
A Nurse	127(30.88)	111(27.07)	7.412(4.462-12.314)	7.408(4.453-12.325)	<0.001**	
A Health Professional	23(5.6)	149(36.3)	1	1		
9. Respondents' Time of Consenting						
Long Before the Surgery	63(15.3)	133(32.4)	0.691(0.461-1.037)	0.693(0.445-1.080)	0.106	
Immediately Before	87(21.21)	127(30.97)	1	1		
the Surgery	0,(21.21)	12.(30.71)	-			

#### 3.6. Results from the Qualitative part

The findings from key informants' are compiled as follows:

Majority of informants had similar understanding about quality of perioperative informations provided to adult surgical patients. The informants explained quality of perioperative informations provided if it is satisfying clients with standardized informational services shortly, respectfully and timely. If the service fulfills the standards and having sufficient quality and sufficient health care provider and organized health facilities with best set up"....( Nurses working for the last 3 years at Surgical ward). A 27 years old Bsc nurse who are working at Surgical ward for 2 years said that "the content of the informations provided to Adult surgical patients in our Hospital was good but it can be of a lesser detail if the patient flow is high. There is no specific policy or guideline prohibiting the provision of perioperative informations in our Hospital", they added.

"One factor that affects the informational quality we provide is we use translators to address patients speaking various languages. We directly speak to the translator not the patient."

A 30 year old Nurse who worked for seven years in different units of Hospital

"Sometimes, patients are overinformed about their conditions. They do not give appropriate value for all types of the informations an empathetic health professional provides. This kills our energy." A 35 years old Nurse

## 4. Discussion

This study was targeted at determining the quality of perioperative informations provided and its associated factors among adult patients who undergone surgery in Arba Minch General, Chencha District and Sawla General Hospitals. According to this study, the proportion of patients who received good quality perioperative informations are only 36.6%. The finding of this study is lower than the finding of an study conducted in Finland[26]. This variation could be due to the difference in care provision system, process and quality as the health care system in Finland is much better than the health care system in Ethiopia. As result, surgical patients in Finland are more likely to receive a more qualified perioperative educations and informations from health care professionals. There were various factors found to be associated with the quality of perioperative informations provided to adult patients who undergone surgery. In this study, respondents who had two and more Hospital visits are 2.6times more likely to receive a better perioperative informations than those who had a single visit to Hospital. This finding is consistent with a narrative review conducted on Factors influencing day surgery patients' quality of postoperative recovery [27]. This could be because; with an increasing frequency to hospital visit, there will be an increased or a more better chance to have an effective communication with a health professional a visitor wants to. The other factor found to have significant association with quality of perioperative informations in this study is an reason for Hospital visit. Study participants who visited Hospital with a reason of follow up are 2.37 times more likely to receive a good quality perioperative information than their fellow ones who visited Hospital due to an illness. This could be associated with the reason that a more frequent visit to the hospital will increase the visitors' direct access to the necessary informations at hand. In addition, making a hospital visit for a follow up is less tense than visiting due to an illness that in turn helps the

visitor to inquire and investigate all the concerns in a more stable, clear and flexible way. According to this study, the presence or absence of previous surgery is significantly associated with the quality of perioperative informations provided .As result, study participants with previous surgery are 2.27 times more likely to receive good quality perioperative informations compared to the study participants who had no history of previous surgery. This could be due to the reason that Having previous Surgery allows the patient to have a practical exposure and knowledge of the surgery and all its aspects better than those who had no surgery previously. Generally, it enhances the informational capital [28]. Additionally, this study revealed significant positive association between number of previous surgeries and quality of perioperative informations provided . Accordingly, the study participants who had one or more previous surgeries were 1.808 times more likely to receive good quality perioperative informations than their fellows who had no previous surgery [28]. Having history of previous surgery will allow the patients to extensively seek and ask for informations as their awareness to surgical aspects is practically higher. In addition; the more surgery a patient undergoes, the better will be the exposure to health professionals which will enhance the patient's confidence to interact and inquire all appropriate informations which may be sourced from varied health professionals. According to this study, the type of health facility where the surgery is performed had a significant association with the quality of perioperative informations provided. Therefore, study participants who undergone surgery in General Hospitals are 33.3% less likely to receive a good quality perioperative informations compared to their counterparts in District Hospital. This may be due to the lesser work load in District Hospitals that enables professionals to communicate &discuss more clearly with patients on their concerns as lesser workload will allow a health professional to have a quality time with the patient. This study showed a significant positive association between the type of professional who performed the specific surgery and the quality of perioperative informations provided. Accordingly, study participants who undergone Surgery by General Surgeons are 2.007 times more likely to receive good quality perioperative informations than those who were operated by IEOS. This finding is in line with an study conducted among Nigerian Nurses where professional rank is found to affect the type and quality of service a professional provides[12]. The rational behind could be that IEOSs are more targeted to specific surgical procedures addressing very specific cases compared to the General Surgeons who manage a more wider cases. As per this study, the other variable found to have significant positive association with the quality of perioperative informations provided is the consenting professional. Accordingly, study participants who were consented by Nurses were 7.408 times more likely to receive a good quality perioperative informations than those who were consented by other classes of health professionals. This is in line with an study conducted in Nigeria [6]. The justification could be due to the reason that Nurses have a higher chance to spend more of their working hours caring and communicating to the patients than any other professional in an specific health facility

## 5. Conclusion

According to this study, the proportion of adult surgical patients who received good quality perioperative informations are only 36.6%. Frequency of Hospital Visit, Reasons for Hospital Visit, Previous Surgery, number of Previous Surgery, Place of Surgery, Surgical Professional and Consenter were significantly associated with the provision of good quality perioperative informations. Therefore, all the health care professionals must strive to improve the quality of perioperative informations provided to adult surgical patients as it is one component of

good health care system.

## Acknowledgement

First and foremost, we would like to thank Almighty God for giving us wisdom and time. Our next appreciation goes to Arba Minch University College of Medicine and health sciences for giving us the chance to involve in this scientific work.

#### References

- [1]. Belihun A., Alemu M., Mengistu B (2015,April): A Prospective Study on Surgical Inpatient Satisfaction with Perioperative Anaesthetic Service in Jimma University Specialized Hospital, Jimma, South West Ethiopia, J Anesth Clin Res 6: 514. doi:10.4172/2155-6148.1000514
- [2]. Zambouri A(2007). Perioperative evaluation and preparation for anesthesia and surgery. Hippokratia. ;11(1):13-21.
- [3]. WHO guidelines for safe surgery:2009
- [4]. Endale Gebreegziabher Gebremedhn et al.(2014,April): Patient satisfaction with the perioperative surgical services and associated factors at Gondar University Referral and Teaching Hospital: a cross-sectional study ,The Pan African Medical Journal ISSN 1937-8688. available at: http://www.panafrican-med-journal.com/content/article/27/176/full/
- [5]. AdesAnmi Akinsulore et al: Assessment Of Preoperative And Postoperative Anxiety Among Elective Major Surgery Patients In A Tertiary Hospital In Nigeria
- [6]. Knowledge, attitude and practice of preoperative visit: A survey of Nigerian perioperative nurses available at (http://www.sciencepublishinggroup.com/j/ajhr)
- [7]. Rozina Barkat Ali, Nasreen S. Lalani, Amina Malik(2012,January):Pre-Operative Assessment and Education, (http://www.SciRP.org/journal/ss)
- [8]. CSA, Summary and Statistical Report of the 2007 Population and Housing Census: Population Size By Age and Sex, CSA, Addis Ababa, Ethiopia, 2008, available on( http://www.measuredhs.com.)
- [9]. Hindawi Publishing Corporation Journal of Blood Transfusion, ArticleID797830, available at http://dx.doi.org/10.1155/2013/797830
- [10]. Central Statistics Agency, ICF Macro Calverton, Ethiopia Demographic and Health Survey, Addis Ababa, 2011
- [11]. Ministry of Health, Health Sector Development Program of Ethiopia (HSDP) IV 2010/11-2014/15.
- [12]. Danjuma et al(2015,Oct.): Knowledge, Attitude and Practice of Preoperative Visit: A Survey of Nigerian Perioperative Nurses. American Journal of Health Research. Special Issue: Health Information Technology in Developing Nations: Challenges and Prospects Health Information Technology. Vol. 3, No. 1-1,, pp. 54-60,. doi: 10.11648/j.ajhr.s.2015030101.18
- [13]. Nigussie et al(2014).:Predictors of preoperative anxiety among surgical patients in Jimma University Specialized Teaching Hospital, BMC Surgery, 14:67 Page5-10, (http://www.biomedcentral.com/1471-2482/14/67)
- [14]. Tateke T, Woldie M, Ololo S(2012),: Determinants of patient satisfaction with outpatient health

- services at public and private hospitals in Addis Ababa, Ethiopia. Afr J Prim Health Care Fam Med.;4(1):384,2012
- [15]. Iliyasu Z, Abubakar I, Lawan U, Gajida A. (2010):Patients' satisfaction with services obtained from Aminu Kano teaching hospital. Nigerian Journal of Clinical Practice;13(4):371–378 [PubMed]
- [16]. Idaqal SM, et al.(2012): Determinants of patient satisfaction in the surgical ward at a University Hospital in Saudi Arabia. Life Science Journal.;9(1):277–280.
- [17]. Bekele A et al. (2008):Levels of outpatient satisfaction at selected health facilities in six regions of Ethiopia. Ethiop J Health Dev.;22(1):42–48
- [18]. Assefa F, Mosse A, H/Michaell Y. (2011) Assessment of clients' satisfaction with health service deliveries at Jimma University specialized hospital. Ethiop J Health Sci. Jul;21(2):101–109 [PMC free article] [PubMed]
- [19]. Fauza A K, Shazia N.(2007) Assessment of pre operative anxiety in patients for elective surgery. Journal of Anesthesiology& Clinical Pharmacology;23(3):259–262.
- [20]. Jafar MF, Khan FA. (2009)Frequency of preoperative anxiety in Pakistani surgical patients. J Pak Med Assoc.;59(6):359–363[PubMed]
- [21]. Shuldham C. (1999):A review of the impact of pre-operative education on recovery from surgery. International Journal of Nursing Students;36:171–177, doi: 10.1016/S0020-7489(99)00010-3. [PubMed] [Cross Ref]
- [22]. Bailey L.(2010): Strategies for decreasing patient anxiety in the perioperative setting. .;92(4):445–460,doi: 10.1016/j.aorn.2010.04.017. [PubMed] [Cross Ref]
- [23]. Patient satisfaction questionnaire, bend surgery center/https://www.bendsurgery.com/patient-satisfaction-questionnaire/
- [24]. Tekelehaymanot G(2017,February): Assessment of Quality of Antenatal Care Service Provision and Associated Factor at Governmental Health Facilities of Harar Town, Eastern Ethiopia, J Gen Pract 6: 367., doi: 10.4172/2329-9126.1000367
- [25]. Abate TM, Salgedo WB, Bayou NB (2015,July): Evaluation of the quality of antenatal care service at higher 2 health center in Jimma, South West Ethiopia, Open Access Library Journal 2: 1-9.
- [26]. Gröndahl W, Muurinen H, Katajisto J, et al.(2019):Perceived quality of nursing care and patient education: a cross-sectional study of hospitalised surgical patients in Finland, BMJ Open ;9:e023108. doi:10.1136/bmjopen-2018-023108
- [27]. Jaensson, M., Dahlberg, K. & Nilsson, U.(2019) Factors influencing day surgery patients' quality of postoperative recovery and satisfaction with recovery: a narrative review. Perioperative Medicine 8, 3. https://doi.org/10.1186/s13741-019-0115-1
- [28]. Nakahira J, Sawai T, Ishio J, Nakano S, Minami T (2019, Oct): Factors Associated with Poor Satisfaction with Anesthesia in Patients Who Had Previous Surgery: A Retrospective Study. Anesthesiology and Pain Medicine.;9(5):e90915. DOI: 10.5812/aapm.90915