

## Comparative Study Between Major and Minor Pre- operative Anxiety and Fear Regarding Patients Undergoing Surgery

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### Abstract:

**Background:** Critical psychiatric nurses have a vital role in identifying and treating the physiologic anxiety and fear experienced by surgical patients such as the patients with major and minor operations. **Aim of the study:** was to assess level of anxiety and fear preoperative and Compare between levels of anxiety and fear pre major or minor operation Regarding Patients Undergoing Surgery in Al-Ahrar hospital at Zagazig City. **Subjects & Methods:** **Research design:** A descriptive comparative design was used in carrying out this study. **Setting:** The present study was conducted in Al-Ahrar hospital at Zagazig City. **Subjects:** Sample size, simple random sample of 126 patients undergoing surgery. **Tools of data collection:** Three tools were used for data collection: Demographic data and Medical history. Visual Analog Scale. And factors affecting fear and anxiety scale. **Results:** Total anxiety and fear scores before operation 77.8% in comparison of patients with minor operation 49.2% with p. value 0.001. Total anxiety and fear scores during operation for patients with major operation was 77.8% in comparison of patients with minor operation was 52.4% with p. value 0.002. Total of anxiety and fear scores after major operation was 69.8% in comparison of patients with minor operation 49.2% with p. value 0.018. fear and anxiety of preoperative patient is positively influenced by age, female gender, educated and worker patients, and study showed that there was statistically significant difference between patients with major operation and minor operation and total fear and anxiety scores before, during and after operation **Conclusion:** there was positive relation between fear and anxiety and type of operation. **Recommendations:** establishing psychological counseling at hospital to assist patients and psychiatric nurses to improve relation and trust. Further research is proposed to assess the effectiveness of training programs fostering applied knowledge on patients and psychiatric nurses.

**Keywords:** Anxiety, fear, Major and minor preparation,

### Introduction:

Surgery is a medical operation used to diagnose, treat person's disease, deformity and injury, it is a threatening experience, with multiple anxious Components concerns about one's physical condition, admission to hospital, anticipation of painful procedures, fears about survival and recovery and separation from family. <sup>(1)</sup> There are two types of surgery: major and minor surgery. <sup>(2)</sup> Minor surgery is any invasive operative procedure in which only skin or mucus membranes and connective tissue is resected e.g. vascular cut down, tonsillectomy. <sup>(3)</sup> Minor surgery presents low risk of complications and fast recovery time. <sup>(4)</sup> Major surgery is any invasive operative procedure in which a more extensive resection is preformed e.g.

body cavity is entered. <sup>(5)</sup> The patient will need to stay in hospital for some time and the risk of complication may be high and the person will take longer time to recover. <sup>(6)</sup> All surgery carries risk to the person. <sup>(7)</sup> Psychological factors are thought to drive inter-patient variations in pre- surgical. <sup>(8)</sup> Anxiety and fear are common in surgical patients during the preoperative period <sup>(9)</sup>, high levels of pre operative anxiety and fear have unfavorable effects on induction and maintenance of anesthesia and recovery from surgery<sup>(10)</sup>. Increased levels of anxiety may alter a patient's surgical course<sup>(11)</sup>.

Anxiety is unpleasant emotional arousal in anticipation of threatening situations, demands and dangers not including anxiety as mental disorder.

(12) Fear is considered as a normal feeling that always accompanies people throughout life. (13)

The incidence of preoperative fear and anxiety ranges from 60% to 92% in unselected surgical patients and also varies among different surgical groups. (14) The degree to which each patient manifests fear and anxiety related to future experiences depends on many factors. (15) These include age, gender, type and extent of the proposed surgery, previous surgical experience, and personal susceptibility to stressful situations. (16) The most common reason for fear and anxiety was the possibility of surgery being postponed, followed by fear that mistakes may be made during the surgical operation resulting in harm to the patient, fear of not receiving enough attention from care givers and fear of "not waking up" after surgery. (17)

Role of the psychiatric nurse to reduce preoperative anxiety and fear is reassuring the patient, relaxation procedures, help to reduce pain, improve outcomes, decrease hospital stays and less complication after surgery by increasing knowledge about fear and anxiety has been associated with both physiological responses such as hypertension and dysrhythmia, which can increase preoperative morbidity. (18)

Moreover, the psychiatric nurses have a vital role in identifying and treating the physiologic anxiety and fear experienced by surgical patients and develop knowledge and skills necessary for comprehensive and successful management of patients performing surgery. (19) The relation between anxiety and fear and psychiatric nurse is an important issue in surgery research.

### **Significance of the study**

Fear and anxiety on the patient of pre major and minor surgery is linked to refusal of surgery or cancellation of planned surgical operations and affected on

postoperative pain, recovery and other unfavorable psychological reactions.

Numerous studies have shown that patients who are less anxious before surgery experience less pain and recover faster and with fewer complications than more anxious patients. The feeling of trust for the surgical team was one of the factors that prevented fear and anxiety. Good surgical and preoperative teams know the fears their patients have, and take pains to provide a feeling of safety and security. The psychiatric nurse has an important role in helping these patients to comply reassuring the patient, recover quickly, reduce preoperative anxiety and fear, reduce pain, reduce staying in hospital and improve outcomes. Therefore, study is an attempt to identify the factors affecting fear and anxiety and role of psychiatric nurse in pre major and minor patients.

### **Aim of the study:**

Assess level of anxiety and fear preoperative and Compare between levels of anxiety and fear pre major or minor operation Regarding Patients Undergoing Surgery in Al-Ahrar hospital at Zagazig City.

### **Research Questions:**

1. What are the patient's level of anxiety and fear pre major and minor operation?
2. Are there any difference between levels of anxiety and fear pre major and minor operation?

### **Subjects and methods:**

#### **Research design:**

Descriptive, comparative design was used.

#### **Study setting:**

The present study was conducted in Al-Ahrar hospital at zagazig city.

#### **Study subjects:**

A purposive sample of 126 patient major and minor operation, sample size is calculated to estimate an expected level of anxiety and fear of patients with 5% absolute precision at 95% confidence level. Prevalence rate of anxiety and fear for pre major and minor surgery is 75 % and study

power at 80% using the equation of single proportion with finite population correction Epi-Info 6, 04 statistical program. The required sample size is convenience sample 126 patients were included in the study. From the above mentioned settings who fulfilled the following inclusion criteria:

- Age over 18 years old
- First time to do operation.
- Male and female patients
- Agree to participate in the study.

#### **Tools of data collection:**

**Interview questionnaire** for data collection composed of two parts:

Demographic characteristics and medical history:

- **Part I: Demographic characteristics of patients undergoing surgery:** Elicit data about Age, sex, marital status, occupation, and education.
- **Part II: Medical History:** Elicit data concerned with medical history of patients with surgery. It involved questions about type of surgery and anesthesia, Knowledge about anesthesia and surgery.

#### **Tool II: Visual analog scale (VAS)**

to clarify the relation between anxiety and fear of patients for pre major and minor operation is useful, valid method and contains 43 items in 3 sections: First section before surgery: It consists of 25 questions related to Patient's knowledge regarding pre major and minor operation, assess patient needs and problems about fear and anxiety for period before surgeries. Second section during surgery: It consists of 9 questions related to Patient's knowledge regarding pre major and minor operation, assess patient needs and problems about fear and anxiety for period during surgeries. Third section after surgery: It consists of 9 questions related to Patient's knowledge regarding pre major and minor operation, assess patient needs

and problems about fear and anxiety for period after surgeries.

#### **The scoring system:**

Scoring system was graded according to the items of interviewing questionnaire. The answers of patients were evaluated using key answer prepared by the author. For each item, a correct answer was scored 1 and the incorrect zero. The scores of total anxiety and fear were converted into percent score, patients level of anxiety and fear was considered satisfactory if the percent score was 60% or higher and Unsatisfactory if less than 60%.

**Tool III: Factors affecting anxiety and fear:** Designed by researcher based on literature review, consists of 11 items related to patient's knowledge regarding factors affecting fear and anxiety and description of anxiety and fear for patients who waiting surgeries which included: Fear from unknown, Fear from disease and Fear from death.

**Scoring system** was graded according to the items of interviewing questionnaire. The answers of patients were evaluated using key answer prepared by the researcher. The scores of total factors affecting anxiety and fear (11 question scored 1-4 Laker score) were converted into four levels included none was considered 1 - 11, slight was considered 12 - 22, moderate was considered 23-33 and sever was considered 34 - 44. These factor affecting fear and anxiety was described anxiety and fear of surgery patients.

#### **Content of validity & reliability:**

The tools were tested for content validity by 5 panels of experts 2 in medical surgical nursing department, 2 in psychiatric and mental health nursing department and administration nursing department. These experts assessed the tools for clarity, relevance, comprehensiveness, applicability, and understanding. into Arabic language using the translate-back-translate technique to ensure their original validity. The tool was

assessed in the pilot study through measuring their internal consistency. They turned to be of high degrees of reliability with high values of Cronbach Alpha coefficients as indicated 0.764 Visual analog scale and 0.83 factors affecting anxiety and fear.

#### **Field Work**

Data collection of this study was carried out through six months in the period from the beginning of April to end of September 2015.

The researcher using a simplified Arabic language to be suitable for the patient; each patient was interviewed individually and each interview took approximately from 20:30 minutes. Each patient was interviewed one time, to fulfill the questions concerned with preoperative assessment and patient's condition. Questionnaire was filled by the investigator according to patients who were admitted before surgery (in the same day) in minor operation and 24 hours before surgery to assess anxiety and fear toward operation.

#### **Pilot Study:**

Before performing the main study, a pilot study was carried out on a sample of 13 patients, representing 10% of the total study sample with pre major and minor operation in Al-Ahrar hospital. The aim was to test clarity of the instructions, the format of the questionnaire, comprehension of the items, and to estimate the exact time required for filling in the questionnaire. The participants involved in the pilot study were excluded from the main study sample.

#### **Administrative and ethical considerations:**

Permission to conduct the study was obtained by submission of official letters issued from the dean of the faculty of nursing at university to the directors of Al-Ahrar hospital. Also informed consent for participation was taken verbally from each patient after full explanation of the aim of the study. They were informed that their participation in this study is voluntarily.

The patient's were given the opportunity to refuse participation, and they were notified that they could remove at any stage of the data collection without giving any reason. They were assured that any information taken from them would be confidential and used for the research purpose only.

#### **Statistical analysis:**

Data entry and statistical analysis were done using (SPSS) software version 19.mean and standard deviation, median and percentages were used for data summarization .patient's t test and chi square test were used for testing significant differences and relations between variables. Patient's correlation test was used for testing linear relationship between numeric variables. Significant difference was considered if  $p \leq 0.05$ .

#### **Results:**

**Table (1):** The demographic characteristics in the study sample shows that the majority of studied patients 60.3 % was <35 years with range of age from 18-76 years, 56.7% was females, 61.1% was urban areas,46.8 % had secondary school education, 71.4% were working, 57.1% married and 78.6% had enough income.

**Table (2):** Clarified feeling disturbances during wait for operation the majority of studied patients 89.68% had disturbance of thinking, 79.36% had disturbance of pulse, 78.6% had disturbance of sleeping, 60.3% had increase movement and sweating of hand, 38.1% had increase voiding while, 19.8% of patients had disturbance of blood pressure.

**Figure (1):** Illustrates that 52.4% general surgery was the highest performed operation while 1.6% ophthalmic surgery was the lowest performed operation.

**Table (3):** clarified that 50% of performed operation was minor and 50% was major operations, 54% patient received general anesthesia, 61.1% of the studied patients had

knowledge about operation and 40.5% of patient source of their knowledge about operation was from families and friends.

**Table (4):** Clarified that total fear and anxiety scores reveal statistically significant difference between patients with major operation 77.8% and minor operation 49.2% before operation and total fear and anxiety with p. value 0.001, also there was statistical significant difference between patients regarding total of fear and anxiety scores with major 77.8% and minor 52.4% during operation with p. value 0.002. In addition there was statistical significant difference between patients regarding total of fear and anxiety scores with major 69.8% and minor 49.2% after operation with p. value 0.018.

**Table (5):** Indicated that there was statistically significant difference between type of operation and factors affecting fear and anxiety scores (fear from unknown) especially with moderate stage fear and anxiety from unknown health care providers was more in major operation 69.8% than minor operation 54% with p. value 0.031.

**Table (6):** Indicated that there was statistically significant difference between type of operation and factors affecting fear and anxiety scores (fear from disease) especially with sever stage fear and anxiety from Sever Pain after operation was more in major operation 77.8% than minor operation 57.1% with p.value 0.013.

**Table (7):** Indicates that there was statistically significant difference between type of operation and factors affecting fear and anxiety scores (fear from death) especially with sever stage fear and anxiety from no recovery from anesthesia was more in major operation 80.95% than minor operation 73% with p.value 0.007.

**Table (8):** Clarified the relation between total fear and anxiety scores and demographic characteristics of the patient in the study sample, indicates

that there was statistically significant difference between total fear and anxiety scores and demographic characteristics age, education and occupation of the patient in the study sample with p.value 0.039, 0.005 and 0.001 respectively.

**Table (9):** Clarified that there was statistically significant difference between total fear and anxiety scores in major and minor operation and feeling disturbance regarding disturbance of pulse, thinking, sleeping and increase movement and sweating of hand.

### Discussion:

The surgical act was responsible for varied psychological reactions and Surgery results in increased patient's fear and anxiety, The anesthesia fantasies, the surgical aggression of the human body, the fear of death, the lack of information, and the other factors contribute to the occurrence of symptoms and psychiatric problems such as anxiety, fear, this problems lead to refusal of surgery or cancellation of planned surgery In congruence with this, Kiyohara, Brown JK, Hanson<sup>(20)</sup>. The present study demonstrated positive influence of patient's age on their anxiety and fear. In congruence with this, Nagpal<sup>(21)</sup> who found that the patients of minor, major surgery was positive effect on patient's age..

The findings revealed that slightly more than half of studied patients were females, this might be due to females were associated with more fear and anxiety than males. On the same line, the study of Caldwell<sup>(22)</sup> et al who showed that half of patients were females were increase anxiety and fear.

The findings revealed that more than half of studied patients were from urban, this might be due to Al-Ahrar hospital was the nearest hospital from them in Zagazig city to get health care.

The findings revealed that slightly less than half of studied patients had

moderate education, this might due to the most of patients have awareness of good health care before, during and post surgery. On the same line, the study of Kayano <sup>(23)</sup> in china reported that less than half of studied patients had moderate education. But the results in Iran city by Mohammadi <sup>(24)</sup> disagree with this study and reported that there was negative relation between patient's education and anxiety and fear.

The findings revealed that slightly less than three quarters of studied patients were working and had enough income. In congruence with this, a study in French by Lopez <sup>(25)</sup> who found that three quarters of studied patient's workers and had enough income.

The findings revealed that more than half of studied patients were married, this means that more patients living with their families and this may be due to the best support before surgery.

In agreement with this, a study in French by Perks <sup>(26)</sup> who reported that slightly more than half of studied patients living with their families and friends.

The current study revealed that slightly less than majority of studied patients had increase disturbance of thinking, slightly less than most of patients had disturbance of pulse, more than three quarters had disturbance of sleeping, more than half had disturbance of movement and sweating of hand and founded that about one fifth of studied patients had increase disturbance of blood pressure. Similar findings were reported by Davidson <sup>(27)</sup> in United States who revealed that the most of studied patients had disturbance of thinking and disturbance of pulse, disturbance of sleeping, disturbance of movement and sweating of hand and one fifth of patients had disturbance of blood pressure.

The present study revealed that the general surgery was the highest performed operation this might be due

to more than half of patient's number diagnosed to perform general surgery. In congruence with this, a study of Amsterdam by Karas <sup>(28)</sup> who revealed that the general surgery was more than half of patients.

The current study results revealed that the half of studied patients were performed major and minor operation this might be due to rate of patients admission to hospital were equal numbers. . In agreement with this, Barkus <sup>(29)</sup> in Karachi who revealed that more than half of the studied patients were major and minor operations this means that both major and minor surgery were very important events. On the contrary with the present study, a study by Henry <sup>(30)</sup> in Amsterdam who revealed that the most of studied patients were performed major operation and one thirds of studied patients were performed minor operation.

The current study results revealed that more than half of patients used general anesthesia this might be due to more patients had more fear from surgery and they did not like feel anything during surgery.

The current study results revealed that less than half of patients had knowledge about operation from their families and friends this may be due to the families and friends were the nearest people and support to them.

The current study illustrates that positive relation between total fear and anxiety scores and patients with major operation and minor operation on surgery stages before, during, and after operation, this might be due to more than half of patients before, during, after major operation were tried to decrease anxiety and fear through getting more information of their surgeries to improve health, to quickly recovery than patients of minor surgery. In congruence with this, Rodrigues <sup>(31)</sup> in Amsterdam. On the contrary with the present study, a study by Nilsson <sup>(32)</sup> in United States

study disagree with the present study and clarified that there was negative relation between total fear and anxiety scores and patients with major operation and minor operation regarding before, during, after surgery, this might be due to the patients with both major and minor operation had important event

The findings illustrates that there was statistically significant difference between type of operation and factors affecting fear and anxiety scores especially with moderate stage fear and anxiety from unknown health care providers was less than three quarters in major operation in comparison of more than half in minor operation.

The findings illustrates that there was statistically significant difference between type of operation and factors affecting fear and anxiety scores fear from disease especially with sever stage fear and anxiety from Severe Pain after operation was slightly more than three quarters in major operation in comparison of slightly more than half in minor operation.

The findings illustrates that there was statistically significant difference between type of operation and factors affecting fear and anxiety scores fear from death especially with sever stage fear and anxiety from no recovery from anesthesia was the most of patients in major operation in comparison of slightly less than three quarters in minor operation.

The present study highlighted that statistically significant difference between total fear and anxiety scores and demographic characteristics especially age, education, occupation in the study sample, this might be due to most of the patients with especially characteristics age, education, occupation of major or minor operation had more fear and anxiety.

The present study revealed that statistically significant difference between total fear and anxiety scores in major and minor operation and

feeling disturbance among studied patients especially regarding disturbance of pulse, thinking, sleeping and increase movement and sweating of hand, this might be due to more than number of patients with major operation had more disturbance of vital signs may lead to more dangerous of health and more disease than patients with minor operation. In congruence with the current study, Welsh<sup>(33)</sup> et al in United States who demonstrated that there was statistically significant difference between total fear and anxiety scores in major and minor operation and feeling disturbance among studied patients especially regarding disturbance of pulse, thinking, sleeping and increase movement and sweating of hand.

#### **Conclusion:**

Based on the results of the present study it could be concluded that

- Patients fear and anxiety is positively influenced by their age, female gender, educated and worked patient in this study.
- There was statistically significant difference between total anxiety, fear scores and before, during, after operation of patients with major and minor operation.
- The study concluded that statistically significant difference between type of operation and factors affecting fear and anxiety (fear from unknown, fear from disease, and fear from death).
- There was positive relation between type of operation, total fear, anxiety and socio-demographic characteristics (age, education, occupation).

#### **Recommendations:**

On the basis of the current study findings, the following recommendations are suggested:

- Establishing psychological counseling at hospital to assist patients to improve relation and trust between team of hospital such as psychiatric nurses, doctors, workers

and patients to reduce anxiety and fear.

- Training programs fostering applied knowledge on patients and psychiatric nurse to reduce anxiety and fear.

- Group discussion and health education for patients with major and

minor operation to reduce anxiety and fear and decrease complications after surgeries.

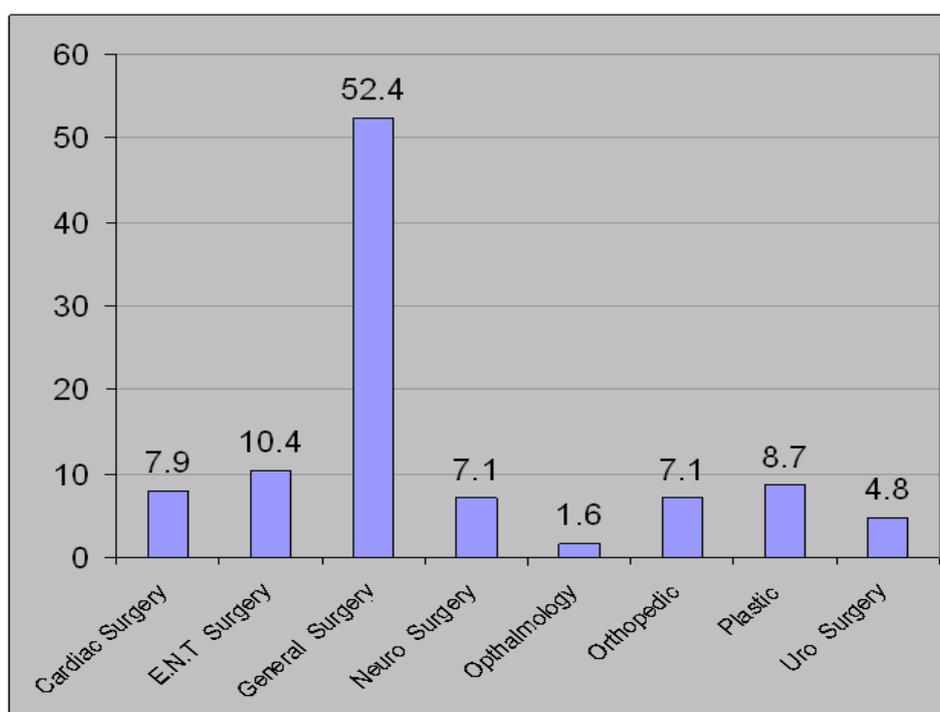
- Further research is proposed to test the effectiveness of nursing interventions in decreasing anxiety and fear symptoms and factors pre, during and after patient's surgeries.

**Table 1:** Demographic Characteristics of Studied Patients (No. =126)

<b>Socio-demographic data</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age (years)</b>		
• <35	76	60.3
• ≥35	50	39.7
• range	18-76	
• Median	30	
• Mean ± SD	33.4± 12.5	
<b>Gender</b>		
• Male	55	43.3
• Female	71	56.7
<b>Residence</b>		
• Urban	77	61.1
• Rural	49	38.9
<b>Education</b>		
• Illiterate	8	6.3
• Primary	20	15.9
• Secondary	59	46.8
• University	39	31
<b>Occupation</b>		
• Not working	36	28.6
• Working	90	71.4
<b>Marital status</b>		
• Unmarried	54	42.9
• Married	72	57.1
<b>Income</b>		
• Not enough	27	21.4
• Enough	99	78.6

**Table 2:** Feeling disturbance during wait for operation among studied patients (n=126)

Feeling disturbances	No.	%
• Disturbance of sleep	99	78.6
• Disturbance of thinking	113	89.68
• Disturbance of vital sign		
• Disturbance of blood pressure	25	19.8
• Disturbance of pulse	100	79.36
• increase movement	76	60.3
• sweating of hand	76	60.3
• increase voiding	48	38.1

**Figure 1:** Type of performed operations to studied patient

**Table 3:** Characteristics of Performed Operations to Studied Patients (No. =126)

Operation type	No.	%
• Minor	63	50
• Major	63	50
• Anesthesia type		
• Local	14	11.1
• General	68	54
• Spinal	44	34.9
• Knowledge about operation		
• No	49	38.9
• Yes	77	61.1
Source of knowledge about operation(no.=77)		
• Mass media	3	2.4
• Journals	1	0.8
• Internet	4	3.2
• Special reading	2	1.6
• Families/friends	51	40.5
• Health care providers	10	7.9
• Other patients	6	4.7

**Table 4:** Comparison between type of operation and total fear and anxiety scores among studied patients (No. =126)

Fear and Anxiety scores	Minor No.=63		Major No.=63		X2	p.value
	N	%	N	%		
• Total fear and anxiety scores before operation $\geq 60\%$	3	4	4	7	11.09	<0.001**
• Total fear and anxiety scores during operation $\geq 60\%$	3	5	4	7	8.94	0.002*
• Total fear and anxiety scores after operation $\geq 60\%$	3	4	4	6	5.57	0.018*
• Total fear and anxiety score $\geq 60\%$	3	4	4	7	11.09	<0.001**

(\*) Statistically significant at  $P < 0.0$  (\*\*) statistically Significance at p. value  $< 0.001$

**Table 5:** Factors affecting fear and anxiety scores (fear from unknown) among studied patients with major and minor operation

Factors affecting fear and anxiety	Minor No.=63								Major No.=63								p.value
	No		Slight		Moderate		Sever		No		Slight		Moderate		Sever		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
A-Fear from Unknown Waiting before operation	8	12.7	13	21	32	50.8	10	15.9	3	4.8	13	20.6	24	54	13	20.6	0.436
Health care providers	6	9.5	12	19	34	54	11	17.5	8	12.7	2	3.2	34	69.8	9	14.3	0.031*
operation outcome	6	9.5	8	13	15	23.8	34	54	4	6.3	8	12.7	8	12.7	43	68.3	0.294
not knowing what happen	4	6.3	10	16	22	34.9	27	42.9	5	7.94	7	11.11	22	34.9	29	46.03	0.945
Total	4	6.3	10	16	22	34.9	27	42.9	5	7.94	7	11.11	22	34.9	29	46.03	<0.001*

**Table 6:** Factors affecting fear and anxiety scores (fear from disease) among studied patients with major and minor operation

Factors affecting fear and anxiety	Minor No.=63								Major No.=63								p.value
	No		Slight		Moderate		Sever		No		Slight		Moderate		Sever		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
B-Fear from disease Nausea and vomiting after operation	9	14	24	38	26	41	4	6.3	8	13	23	37	27	43	5	7.9	0.1
Sever Pain after operation	2	3.2	4	6.3	21	33	36	57	2	3.2	5	7.9	7	11	49	78	0.013*
Recovery after operation	2	3.2	8	13	23	37	30	48	2	3.2	6	9.5	21	33	34	54	0.89
Recovery during anesthesia & operation	4	6.4	6	9.5	39	62	14	22	1	1.6	10	16	29	46	23	37	0.075
Total	2	3.2	6	9.5	41	65	14	22	2	3.2	5	7.9	33	52	23	37	<0.001*

**Table 7:** Factors affecting fear and anxiety scores (fear from death) among studied patients with major and minor operation:

Factor affecting fear and anxiety	Minor No.=63								Major No.=63								p.value
	No		Slight		Moderate		Sever		No		Slight		Moderate		Sever		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
C-fear from death																	
1-Side effects from anesthesia	5	7.9	8	13	24	38.1	26	41	4	6.3	7	11	28	44.4	24	38.1	0.9
2-No recovery from anesthesia	6	9.5	2	3.2	9	14.3	46	73	5	7.9	1	1.6	6	9.52	51	80.95	0.007*
3-physical/mental complications	6	9.5	5	7.9	19	30.2	33	52	5	7.9	4	6.4	9	14.3	45	71.43	0.129
Total	6	9.5	5	7.9	19	30.2	33	52	5	7.9	4	6.4	9	14.3	45	71.43	<0.001*

(\*) Statistically significant at  $P < 0.05$  (\*\*) statistically Significance at p. value  $< 0.001$

**Table 8:** Relationship between total fear and anxiety scores and socio-demographic characteristics.

Socio demographic data	Fear with minor operation (no.=31)		Fear with major operation (no.=49)		X2	p.value
	No.	%	No.	%		
• Age (years)						
<35	23	74.2	25	51		
≥35	8	25.8	24	49	4.25	0.039*
• Sex						
Male	18	58.1	22	44.9	1.32	
Female	13	41.9	27	55.1		0.251
• Residence						
Urban	18	58.1	35	71.4	1.52	
Rural	13	41.9	14	28.6		0.218
• Education						
Illiterate	7	22.6	1	2.4	12.79	
Primary	2	6.5	13	26.53		
Secondary	15	48.4	20	40.82		0.005 *
University & over	7	22.6	15	30.61		
• Occupation						
Working	26	83.9	3	6.1		
Not working	5	16.1	46	93.9	49.67	<0.001**
• Marital status						
Married	16	51.6	30	61.2		
Unmarried	15	48.4	19	38.8	0.72	0.397
• Income						
Enough	25	80.6	37	75.5		
Not enough	6	19.4	12	24.5	0.29	0.592

**Table 9:** comparison between Feeling disturbances among studied patients and total fear and anxiety scores in major and minor operation.

comparison between total fear and anxiety scales in major and minor operation and Feeling disturbance among studied patients	Total fear		Total fear		X2	p.value
	Minor		Major			
	No.=31		No.=49			
	No.	%	No.	%		
• Disturbance of sleep	20	64.5	43	87.8	6.13	0.013*
• Disturbance of thinking	21	67.7	44	89.8	6.06	0.014*
• Disturbance of vital sign						
• Disturbance of blood pressure	4	12.9	17	34.7	4.66	0.031*
• Disturbance of pulse	22	71	48	98	12.7	<0.001**
• increase movement	21	67.7	45	91.8	7.64	0.006*
• sweating of hand	21	67.7	45	91.8	7.64	0.006*
• Increase voiding	16	51.6	27	55.1	0.09	0.76

(\*) Statistically significant at  $P < 0.05$

(\*\*) statistically Significance at p. value  $< 0.001$

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