

Preoperative Anxiety and Fears among Adult Surgical Patients in Baghdad Teaching Hospital, Iraq

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Abstract

Background: Surgery was suggested as a major life change that negatively affects the patient's recovery and post-operative pain.

Objectives: The study aims to assess the preoperative anxiety levels among surgical patients, to determine the fears related to surgery and to find out the relationships between some variables; age, sex, marital status, educational level and experience of previous surgery and level of anxiety.

Methodology: a cross-sectional study was conducted on patients undergoing surgery under a general anesthesia in general surgery unit of Baghdad Teaching Hospital from 1st August 2018 to 30th May 2019.

Results: the current study indicated that all patients 80 (100%) were experience a preoperative anxiety in different levels; 36.2% of them had a high level of anxiety, 32.5% had a moderate level of anxiety and (31.2%) had a low level of anxiety. The main source of patients' fears was; fear of death (51.2%), post-operative wound pain (48.8%), and fear of post-operative nausea and vomiting (47.5%) There was a significant relationship between age and level of anxiety. No difference in level of anxiety in respect to gender and previous surgery.

Key words: *preoperative, anesthesia, anxiety, surgery, patients.*

Introduction

Anxiety has been described as a normal psychological response to stress. It is uneasy and unspecified feeling. The preoperative period is a worrying event for surgical patient. Patients may perceive the day of surgery as the largest and most dangerous day in their life ⁽¹⁾. The psychological symptoms of anxiety can be observed during preoperative period which may include increased tension, irritability, apprehension, aggression, nervousness and insecurity ⁽²⁾. Many studies suggested that factors of pre-operative anxiety depend on age, sex, marital status, educational level, uncertainty of the precise day of operation, the pre-operative patient anxiety caused by many fears which include; fear of unknown, fear of medication, concern about pain, loss of control, and fear of death ⁽³⁾. The extent of anxiety levels differs from person to person, it varies over time; different patients respond perioperative period in different ways, some of them experienced it as a stressful event; they

were concerned about their distress or concerned about the achievement of the operation ⁽⁴⁾. The anxious patient response differently to anesthesia and analgesia when compared with non-anxious patient; patient who experience high level of anxiety requires more anesthetic to achieve sedation and needs to increased doses of analgesia to relief pain. Research studies suggested that pre-operative anxiety increased post-operative pain, fatigue, nausea, delay recovery period and depression ⁽³⁾. Provide patients with appropriate information during the period prior to anesthesia will decreases patient's anxiety. Many studies suggest that patients receiving pre-anesthetic information experience low levels of anxiety ⁽⁴⁾. **Objectives of the study:** To assess the preoperative anxiety levels among patients undergoing a surgery. To determine the fears related to surgery. To find out the relationships between some variables (age of patients, sex, marital status, level of education and experience of previous surgery) and level of anxiety.

Methodology

A descriptive study was conducted on patients undergoing surgery under a general anesthesia in general surgery unit from 1st November 2018 to 30th April 2019. A purposive (non-probability) sample of 80 adult patients from both sexes who were admitted for semi-elective surgery in Baghdad Teaching Hospital from 1st December to 31 December 2018. A questionnaire was constructed to achieve the study objectives, it consists of 3 sections:

- 1- The socio-demographic characteristics of patient.
- 2- The data related to previous surgery and fears about anesthesia.
- 3- Assessment the level of anxiety using the (STAI) scale: State Trait Anxiety Inventory for adults of Spielberger, 1977 which contain (20) items ⁽⁵⁾. The

researcher translated the scale to Arabic language. Some items reflect a positive response while others reflect a negative response, so the scoring and rating for negative items is (not at all=1, sometimes=2, moderately=3, very much=4) and positive items is (not at all=4, sometimes=3, moderately=2, not at all=1). The levels of anxiety measured according to cut to off point and the range of scoring is: 0-20 = no anxiety, 21-35= low anxiety, 34-51= moderate anxiety, 52-77= high anxiety.

The questionnaire was presented to (5) experts in psychiatric mental health nursing in order to test its validity. For the purpose of measuring the reliability of the questionnaire the Cronbach's alpha (coefficient alpha) used to estimate the internal consistency for the level of anxiety scale which= 0.746. The data has been collected by interviews the patients before 1/2 an hour of surgery after obtaining oral consents in the preparatory room.

Results and Discussion

Table (1): The demographic characteristics of surgical patients

No.	Variables	f	%	
1	Age	18-27	30	37.5
		28-37	20	25
		38-47	16	20
		48-57	8	10
		58-67	6	7.5
	Total	80	100%	
2	Sex	male	47	58.8
		female	33	41.2
	Total	80	100%	
3	Marital status	married	44	55
		divorced	8	10
		widowed	6	7.5
		single	22	27.5
	Total	80	100%	

Cont... Table (1): The demographic characteristics of surgical patients

4	Educational level		8	10
		Read & write	9	11.2
		Primary	12	15
		Intermediate	8	10
		Secondary	9	11.2
		≥ Bachelor	34	42.5
		Total	80	100%
5	Employment	employed	44	55
		retiree	5	6.2
		not employed	31	38.2
		Total	80	100%
6	previous surgery experience	Yes	39	48.8
		No	41	51.2
		Total	80	100%

Table (1) revealed that the patients aged between (18-67) years old with mean of age around 35 years and Standard Deviation (SD) = 12.482. More than half of them are males (58.8%) and married (55%). As regarding to their level of education, the highest percentage of them were had a bachelor degree (42.5%). And 55% of patients were employed. Approximately half of them were not experience a previous surgery (51.2%).

Table (2): Distribution of patients according to fears related to anesthesia and surgery

No	Items	Yes		No		Total	
		f	%	f	%	f	%
1	Fear of being unconscious as a result of anesthesia	31	38.8	49	61.2	80	100%
2	Fear of postoperative wound pain	39	48.8	41	51.2	80	100%
3	Fear of not wake up again next the operation	37	46.2	43	53.8	80	100%
4	Fear of an inadequate anesthetic effect and stay conscious during surgery	32	40	48	60	80	100%
5	Fear of post-operative Nausea and vomiting	38	47.5	42	52.5	80	100%
6	Fear of death	41	51.2	39	48.8	80	100%

Table (2) indicated that the main source of patients' fears were; fear of death (51.2%), postoperative wound pain (48.8%), fear of post-operative nausea and vomiting ((47.5%), fear of not wake up again next the operation (46.2%) and (40%) of them were fared from staying conscious during surgery and (38.8%) of them were afraid from unconsciousness results from effect of anesthesia .

The result of the current study was congruent with Mavridou et al, (2013) and Biro and Maurer, 2015 who reported in their studies that patient's fears of anesthesia mostly focus on post-operative wound pain, post-operative nausea and vomiting, not waking up after surgery and that they might stay conscious during surgery that they might not wake up again after the operation ^{(6) (7)} . Nigussie et al, 2014 mentioned that the most common pre-operative fears were fear of death, financial loss, result of surgery and awareness during surgery ⁽¹⁾.

Table (3): Distribution of patients according to Level of anxiety

No.	Level of anxiety	f	%
1	Low anxiety	25	31.2
2	Moderate anxiety	26	32.5
3	High anxiety	29	36.2
Total		80	100%

Table (3) indicated that all patients 80 (100%) experience a preoperative anxiety in different levels; (36.2%) of them had a high level of anxiety, (32.5%) had a moderate level of anxiety and (31.2%) had a low level of anxiety.

This result was congruent with Mavridou et al (2013) who reported that (81%) of patients experience preoperative anxiety ⁽⁶⁾. Bakr et al (2014) mentioned in their study that most patients had moderate to severe anxiety levels and others had mild anxiety levels. Ramesh et al (2017) reported that most of patients had increased preoperative anxiety ⁽⁸⁾.

Table (4): Analysis of variance for level of Anxiety among Patients with their Demographic Characteristic (N=80)

Anxiety Characteristics	Source of Variance	Sum of Squares	df	Mean Square	F	P-value (Sig.)
Age	Between Groups	1796.988	4	449.247	2.766	.033 (S)
	Within Groups	12182.562	75	162.434		
	Total	13979.550	79			
Marital status	Between Groups	952.429	4	238.107	1.371	.252 (N.S)
	Within Groups	13027.121	75	173.695		
	Total	13979.550	79			
Educational level	Between Groups	1072.174	5	214.435	1.229	.304 (N.S)
	Within Groups	12907.376	74	174.424		
	Total	13979.550	79			
Employment	Between Groups	52.568	3	17.523	.096	.962 (N.S)
	Within Groups	13926.982	76	183.250		
	Total	13979.550	79			

(df: degree of freedom, S: significant, N.S: non-significant)

Table (5) revealed that there is a statistical significant relationship between the age and level of anxiety while there is no statistical significant relationship between marital status, educational level and employment with the level of anxiety. This result was supported by Bakr et al (2014) and Almalki et al (2017) who founded in their studies a highly significant relationship between age of surgical patients and anxiety levels ⁽⁸⁾⁽⁹⁾.

As regards to other socio-demographic characteristics variables the current study revealed that

there is no significant relationship between anxiety level and marital status, educational levels, employment and income. These findings were consistent with a study of Ramesh et al (2017) who reported that was no association between socio-demographic variables such as education and occupation with the level of anxiety ⁽¹⁰⁾. Woldegerima et al (2017) found that no statistical significant relationship between anxiety and level of education ⁽²⁾. In a study of Matthias and Samarasekera (2012) reported that there was no relationship between the anxiety level and educational level and marital status ⁽¹¹⁾.

Table (5): Significant Difference for level of Anxiety among Patients with respect to their Gender and Previous Surgeries (N=80)

Anxiety Variable			Independent t-test					
			M	SD	t	df	P ≤ 0.05	Sig.
Gender	Male		43.212	13.411	-.369	2	.713	N.S
	Female		44.333	13.324				
Previous Surgery	Yes		41.962	13.543	1.306	2	.195	N.S
	No		45.561	12.951				

Table (5) indicated that there is no difference between males and females in level of anxiety while there is no statistical significant association between presence of previous surgery and anxiety level. This result was congruent with a result of the study of Nigussie et al (2014) who reported that there was no variance between males and females in anxiety level ⁽¹⁾. Some studies have discovered that women experience elevated rates of anxiety compared to men. The results also supported by Almaliki et al (2017) who were found that no significant relationship between exposure of previous surgery and pre-operative anxiety level ⁽⁹⁾.

Conclusions

All patients were experience a preoperative anxiety in different levels; the highest percentage had a high level of anxiety. The main source of patients’ fears was; fear of death, post-operative wound pain, fear of post-operative nausea and vomiting. There was a significant relationship between the age and anxiety level while there was no significant relationship between level of anxiety and the demographic characteristics of patients; level of education, marital status and employment. There was no difference in anxiety level among male and

female patients and there was no significant relationship between level of anxiety and the experience of previous surgery.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Institute of Medical Technology - Baghdad / Middle Technical University and all experiments were carried out in accordance with approved guidelines.

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