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**INTERNATIONAL JOURNAL OF  
 ADVANCED RESEARCH (IJAR)**

Article DOI: 10.21474/IJAR01/2285  
 DOI URL: <http://dx.doi.org/10.21474/IJAR01/2285>



### RESEARCH ARTICLE

#### GENERAL CONCERNS OF ANESTHESIA AMONG PREOPERATIVE PATIENTS IN HAIL REGION, SAUDI ARABIA.

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#### Manuscript Info

##### Manuscript History

Received: 29 September 2016  
 Final Accepted: 30 October 2016  
 Published: November 2016

#### Abstract

**Background:** There are no enough studies that focus on the major concerns among preoperative patients who will exposed to Anaesthesia and lack of proper health educations about their concerns.

**Objective:** To recognize the major concerns regarding anaesthesia preoperatively in hail region by assessing the main sources of preoperative patients' distress.

**Methodology:** A Cross- Sectional based study conducted at King Khalid Hospital in Hail city, Saudi Arabia. Data were collected through personal structured interviews after informal consents from the patients. Data was entered and analyzed by Statistical Package for Social Software Program (SPSS) version 14.

**Result:** From 572 questionnaires 500 were collected and analyzed. The predominant gender respondents were female 371 (74.2%) and the mean age was 35±10. 234 (46.8%) respondents were college degree. The top three causes of their fears were the fear of drugs overdose, fear of intra-operative awareness followed by fear of postoperative pain, respectively.

**Conclusion:** Females under the age of 40 with low education level were more afraid of General Anaesthesia .So we think it is important to help them by a preoperative consultation with the anesthesiologist to relief their anxiety and prevent any further complication.

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#### Introduction:-

Anesthesia is a chemicals Derived from specific plants so it's can be given in form of drug (either local or general) to let the patient unconscious during a surgical procedure. Anesthesia aims to relieve the patient's pain during the surgery that may potentiate extreme physiologic exacerbations and result in unkind memories. It is normal for one to be anxious when thinking that they cannot be in control of their own body. The anxiety and fear of anesthesia in patients who underwent surgery interfere with compliance of the patient in the postoperative period <sup>1</sup>.

The main sources of their preoperative anxiety were fear of postoperative pain followed by not waking up after surgery and being nauseous or vomiting<sup>2</sup>.

Another study also has been done by another research team showed that the fear of postoperative pain followed by fear of intra-operative awareness and fear of being sleepy postoperatively<sup>3</sup>.

Due to lack of data regarding those concerns among our preoperative patients we carried out this study to find out what are the major concerns among our community. And provide a comprehensive teaching protocols among them.

### Methodology:-

Our study was a cross – sectional descriptive study that was approved by the Ethics Committee of King Khalid Hospital, Hail origin, Saudi Arabia. The duration of this study was from 1<sup>st</sup> July to the end of October 2016.

King Khalid Hospital is the major public hospital in Hail State and is located in Hail city which the capital of the state. It is the major referral hospital for tertiary medical care in the area.

We included all the preoperative patients who agree to refill the questioner 500 patients and we excluded those patients who refused to cooperate with us 72 patients. Five hundred seventy patients attended preoperative anesthetic clinics. (an informed consent was obtained from all patients).

Personal characteristics and history data were entered and analyzed using SPSS version 16. Data were given as frequency destitution, mean values, standard deviation and P- value.

### Result:-

Five Hundred questionnaires were documented and analyzed from the pre anesthesia clinics in King Khalid Hospital, Hail, Saudi Arabia. In our study, the predominant gender respondents was female 371 (74.2%) and the mean age was 35 and SD  $\pm 10$ . We found in our study 234 (46.8%) respondents were college degree.

We found in our study, 293 (47.8%) respondents had previously been exposed to anesthesia  $\geq 2$  times. Most patients had previously been exposed to anesthesia  $\geq 2$  times 293 (47.8%). By calculation of overall fear, the number of patients who were afraid of anesthesia was 230 (46%) and patients who were not afraid of anesthesia were 270 (54%). The results reveal that patients' demographics are related to their fears. Gender significant effect with women has being more afraid (P = 0.0009). Age significant effect with Patients above the age of 40 years are less fearful of general anesthesia (P = 0.003). While a significant effect with Patients who they have high level education are less fearful of general anesthesia (P = 0.0009). Patients who have had a previous exposure to anesthesia are less fearful than those who did not receive anesthesia before (P = 0.003), see table NO.1.

**Table No.1:-** Shows the demographic data of subjected patients in our study:

Demographics data	Frequency & Percentage
<b>Gender</b>	
Male	129 (25.8%)
Female	371 (74.2%)
<b>Age</b>	
18-25	49 (9.8%)
26-30	127 (25.4%)
31-40	139 (27.8%)
41-50	130 (26%)
50-60	50 (10%)
> 60	5 (1%)
<b>Education level</b>	
Non educated	78 (15.6%)
High school	175 (35%)
College	234 (46.8%)
Ph.D.	13 (2.6%)
<b>Previous experience of GA</b>	
Never	81 (16.2%)
first time	180 (36%)

≥ 2 times	239 (47.8%)
<b>Type of surgery</b>	
First time	82 (16.4%)
Minor	276 (55.2%)
Major	142 (28.4%)

Regarding to the top three causes of their fears, most of them were had fear of drugs overdose 408 (81.6%), fear of intra-operative awareness 404 (80.8%) and fear of postoperative pain 381 (76.2%) Patients were found to be less fearful of drains and needles in the operative theater (50.2%), fear of revealing personal issues under general anesthesia (57%), and not waking up after the surgery (58%), see table No.2.

**Table No.2:-** Shows the major concerns among preoperative patients in our study.

I am concern of	No	Yes
Drains and Needles	249 (49.8%)	251 (50.2%)
Revealing personal issues under GA*	212 (42.4%)	288 (57.6%)
Not waking up after the surgery ( death)	210 (42%)	290 (58%)
Postoperative delirium	206 (41.2%)	294 (58.8%)
Postoperative dizziness	188 (37.6%)	312 (62.4%)
Admission to ICU*	185 (37%)	315 (63%)
Improper care postoperative	183 (36.6%)	317 (63.4%)
Nausea and vomiting postoperatively	179 (35.8%)	321 (64.2%)
Being paralyzed because of anesthesia	174 (34.8%)	326 (65.2%)
The anesthesiologist leaving during the surgery	170(34%)	330 (66%)
The anesthesiologist not being skilled	165 (33%)	335 (67%)
Postoperative pain	119 (23.8%)	381 (76.2%)
Unsuccessful GA*	96 (19.2%)	404 (80.8%)
Anesthesia drugs overdose	92 (18.4%)	408 (81.6%)
*Awareness of surrounding during GA; GA: General anesthesia; ICU: Intensive Care Unit		

### Discussion:-

Our goal study was to focus about the major concerns among people who received anesthesia, and how we can put comprehensive programs to improve the health education among public community. There are few studies on this subject in our country .There were some limitations to this study. Our resources were insufficient to allow full collection of data for calculating the severity of those concerns among all patients.

The overall fear of anesthesia among our patients before going for surgery constitutes the majority of them (46%). this is consistent to the another studies were conducted by another research teams<sup>4, 5, 6&7</sup>. We considered that the religious cultures influence people more in stress-full conditions. Religious beliefs requires a belief in faith and destiny. This belief may have had an increasing influence on the high rate of patients without fear.

We found that preoperative fear is greater in people of a younger age than people of an older age. Our results were inconsistent with previous studies the result showed the fear is greater in people of an old age<sup>1&3</sup>. No specific causes can be predicted behind why our young patients were more afraid of anesthesia.

In our study, women has being more afraid (73%) about anesthesia when compared with male patients. This results was similar with previous studies that showed preoperative anxiety of anesthesia among females being more afraid than males<sup>1&3</sup>.

In our study we found Patients who have had a previous exposure to anesthesia were less fearful than those who did not receive anesthesia before. In similar study in Riyadh, Saudi Arabia Patients who have had a previous exposure to anesthesia are slightly less afraid<sup>1</sup>, and in Ioannina, Greece study show also Slight differences<sup>3</sup>. It is likely because they have the opportunity to be reassured by the anesthesiologist in their previous surgeries.

In our study the major concerns associated with the postoperative period were having pain after waking up from anesthesia (76.2%), in previous studies in Riyadh, Saudi Arabia (77.3%), Ioannina, Greece (84%) and in Karachi, Pakistan (78.8%)<sup>1,3&7</sup> permanent paralysis due to anesthesia(65.2%), nausea and vomiting(64.2%), being drowsy for hours (62.4%) and entering the Intensive Care Unit(63%), in previous studies there were some variations regarding those concerns<sup>1&3</sup>.

Fear of death is surprisingly one of the least fearful factors among the patients (58%), this finding was consistent with another conducted researches<sup>1&3</sup>. Some patients claimed that death does not bring them anxiety from general anesthesia. Possible reason is because of the strong religious belief implemented in our society.

These fears lead to anxiety. Anxiety is linked to many problems that might affect the patient declining the surgery, or might affect the efficacy of the anesthesiologist or surgeon, or it might complicate the surgery itself. The problems associated with preoperative anxiety can give autonomic nervous system disorders such as high blood pressure, arrhythmia, and palpitations. This requires greater amounts of medication (such as Propofol) to induce and maintain anesthesia<sup>8&9</sup>.

Interestingly, patients who experienced preoperative anxiety have postoperative nausea, vomiting, and pain at a greater incidence<sup>10&11</sup>. Preoperative education and detailed explanation about anesthesia are effective in reducing anxiety. should be incorporated into routine practice in pre-anesthesia clinics<sup>7&12</sup>.

### Conclusion:-

Results of this study suggests that Preoperative education and detailed explanation about anesthesia are effective in reducing anxiety. Should be incorporated into routine practice in pre-anesthesia clinics. Although the impact of general concerns among the patients regarding have been evolved regarding the pre-operative anesthesia need very large case control as an initial step to evaluate the major concerns and how we can avoid the conflicts among them.

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