

PATIENT PERCEPTION REGARDING PREOPERATIVE INFORMATION TO ANXIETY TOWARDS SURGERYDevpriya Lakra¹, Shanti Prakash Kujur²**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: OBJECTIVE: Surgeries are seen as stressors that activate preoperative fear. Preparing the patients prior to surgery through preoperative instruction develop crucial to anxiety level. The objective of study is to evaluate the perception of patients regarding anxiety prior to surgery. **METHODS:** A total of 273 patients attending the outpatient department of Hospital were taken in the study. All the patients were aged 20-60 years. The anxiety was measured by means of different questions like fear of surgery, pain due to surgery, postoperative complication, preoperative information of surgery etc. Student's t-test, one-way ANOVA was performed to obtain the mean values of anxiety using SPSS 16.0 for Windows. **RESULTS:** It was found that all of the patients received preoperative information about the surgery to be done and most of them obtained information from doctors (27.6%), hospital management staff (24.3%), and nurses (22.5%). Fear of surgery (18.6%) and pain (17.4%) are most common factors among study participants. Significant results of anxiety was found with educational level and age(p=0.000). **CONCLUSION:** All the patients got information prior to the surgery and main source of information were doctors, hospital management staff and nurses. Mostly patients were anxious of surgery and post-operative pain. Still, health professionals should plan to deliver appropriate information to help patients against this fear.

KEYWORDS: Anxiety, Perception, Preoperative information, Surgery.

INTRODUCTION: Anxiety is a constant motivating aspect in life that can warn people when their wellbeing is threatened. It can be a reply to or a cause of tension. Anxiety due to hospital organization leads to imbalances in homeostasis which elicit a physiological & psychological response that can compromise recovery. Anxiety is the uneasiness and apprehension the patient feels without being able to identify the precise cause.^[1]

Preoperative anxiety is derived from pressure perceived due to threat and risk related to the hospital environment. The incidence of preoperative anxiety reaches up to the level of 92% among patients in surgical wards.^[2] Patients having preoperative anxiety were reported to practice a variety of unpleasant symptoms such as postoperative pain & distress. High level of preoperative anxiety obstructs healing process and it is associated with morbidity and mortality.^[3]

Preoperative teaching is a vital aspect during before surgery. Preoperative teaching facilitates coping by enhancing the sense of self-respect and psychological well-being of patients. 78% of surgical patients had reported the effectiveness of preoperative teaching in reducing anxiety.^[4]

Studies showed that psychological preparation could not accomplish everything. However psychological relaxation techniques such as distraction and imagery have significantly reduced the anxiety level.^[5]

ORIGINAL ARTICLE

The degree to which each patient manifests anxiety related to future experiences depends on many factors as age, gender, type and extent of surgery, and previous surgical experience.^[6] Thus this paper evaluates the perception of patients regarding anxiety prior to surgery according to different factors.

METHODS: The study was conducted from February to May 2015 among 273 patients attending the outpatient department of Hospital, Bilaspur. Out of total subjects 105 were males and 168 were females. The study sample was selected by simple random sampling technique. Ethical clearance was obtained from the Head of the Institute. All the patients were aged 20-60 years. Patients who declined to give informed consent and who were suffering from any anxiety disorders were excluded from the study.

The demographic information was obtained as age, gender, educational status, history regarding previous surgery. A self-structured questionnaire was used to measure the level of anxiety. It was administered in both Hindi and English language and all the patients filled the forms in the waiting hall. Those patients who were uneducated and were unable to read were helped by investigator. The anxiety was measured by means of 11 different questions like fear of surgery, pain due to surgery, postoperative complication, preoperative information of surgery etc.

DATA ANALYSIS: The data were analyzed using number-percentage distributions, averages, Student's t-test, one-way ANOVA was performed to obtain the mean values of anxiety using SPSS 16.0 for Windows. Step-wise multiple linear regression analysis was used to assess the independent variables that significantly influenced the variance in the dependent variables (Anxiety). The p value of 0.05 considered as statistically significant.

RESULTS: All the 273 participants were divided into four groups according to their educational level: illiterate; up to primary education; graduation; and post-graduation. Similarly age was divided into four groups as follows: 20 to 30 years; 31 to 40 years; 41 to 50 years; and 51 to 60 years.

It was found that all of the patients received preoperative information about the surgery to be done and most of them obtained information from doctors (27.6%). Hospital management staff also informed the patients regarding surgery (24.3%), followed by nurses (22.5%), family members (12.6%) and anesthetist (9.8%). Very few patients got information about their procedure from the internet (3.2%) (Graph 1).

Graph 2 showed that fear of surgery (18.6%) and pain (17.4%) are most common factors among study participants. Some cases were insecure of post operative complications (14.6%), 13.8% think that being in hospital during treatment is a major headache. 12.3% think that they will get weakness after surgery. Less number of participants were having the fear of anesthesia (3.5%).

The study showed that female patients were significantly more anxious during treatment as compared to male patients ($p=0.000$) as mentioned in Table 1. Educational level showed a significant correlation with anxiety; with upgrading of education the anxiety scores were lowering (Table 2). But the results were opposite in relation of age, showing that almost the anxiety level was increasing with advancing age as illustrated in Table 3.

It presents a step-wise multiple linear regression analysis in which the dependent variables was Anxiety level. The anxiety level showed significant association with all independent variables as educational level, sex and age in descending order (Table 4).

ORIGINAL ARTICLE

DISCUSSION: The reported incidence of preoperative anxiety in many studies ranges from 60% to 92% among surgical patients.^[2,7] The anxiety level of subjects was examined by gender, and female participants were found to be higher than males with significant differences. This consequence is consistent with other studies conducted in different countries showed females have more anxiety of surgery than males.^[8,9] Egbert et al showed that on an average, 57% of patients felt anxious before operation and female patients were more likely to be anxious.^[10] However, the results of study conducted by Özdemir et al showed higher anxiety and fear level among males.^[11]

The present data showed that the anxiety level was almost increasing with advancing age, older patients were more anxious than younger ones. Locker et al also showed same results that the values were higher in older ages.^[12] Similar results were seen by Arslan and Erten in their study in 2009.^[13] However some studies reported lower anxiety values at 55 years of age and over.^[14,15]

The study also demonstrated the relationship of education status with anxiety and found that significantly more educated patients were having not as much of fear of treatment than less educated. Spielberger et al, also mentioned same relationship between patients and reported that patients with higher levels of education have developed efficient skills in reducing stress.^[16] Similarly, Doerr et al & Elter et al mentioned that as the education increased, anxiety diminished.^[14,15] Whereas, a study done by Görgün et al. found that the highest level of anxiety was in those who had postgraduate education.^[17] Some researchers did not reveal any relationship between anxiety of surgery and education.^[9,18]

This consequence may indicate that those with a low level of education have insufficient information about the treatment and those with a high level of education have too much information before the treatment. So, it may be advisable to give general explanations to patients before any operation without going into too much detail.

Patients should use relaxation and breathing techniques that successfully reduce the fear of receiving treatments. A common method is Jacobsen's progressive muscular relaxation is used, which relaxes patients by reducing muscle tension, and makes them more aware of their stress. Their greater feeling of control over the situation and over their anxiety symptoms should translate into greater ability in coping with the stress of dental treatment. A simple scheme for progressive muscular relaxation involves tensing and relaxing groups of muscles in turn, for example from the feet through the lower body and abdomen to the thorax and then the head and neck.^[19]

In the present study, most of the subjects were anxious of surgery and post-operative pain. However in some studies patients were mostly afraid of equipment and instruments were found in 38% of the sample but only 8.5% reported high fear. These results are within the range reported by previous studies.^[20,21]

The present study found that all of the patients received preoperative information about the surgery to be done and most of them obtained information from doctors (27.6%), hospital management staff (24.3%) and nurses (22.5%). However, Kelly et al mentioned that 97.5% (N=78) of the patients agreed that they received preoperative information but only 10% (N=8) noted receiving the information from the nurses. 1.3% claimed that details of operation theatre were inadequately told and another 3.8% claimed that details of surgical procedure were insufficiently provided.^[5]

CONCLUSION: The results revealed that all the patients got information prior to the surgery and main source of information were doctors, hospital management staff and nurses. Mostly patients were anxious of surgery and post-operative pain.

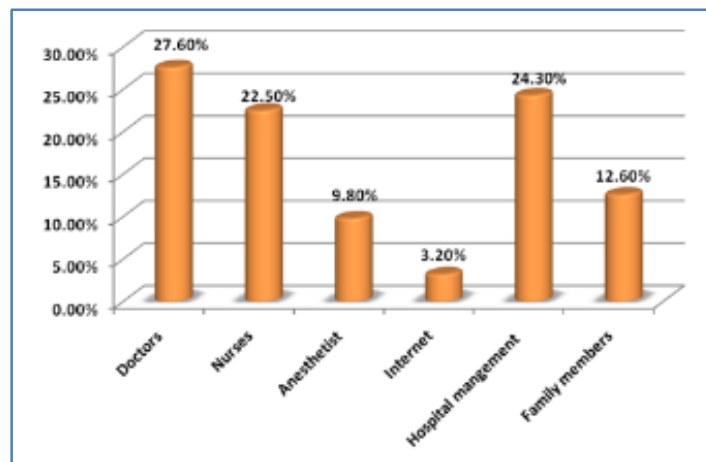
Female patients were having more anxiety than males and their anxiety level was increasing with age and decreasing with education. Still, health professionals should plan and implement correct and appropriate procedures to help patients against this fear.

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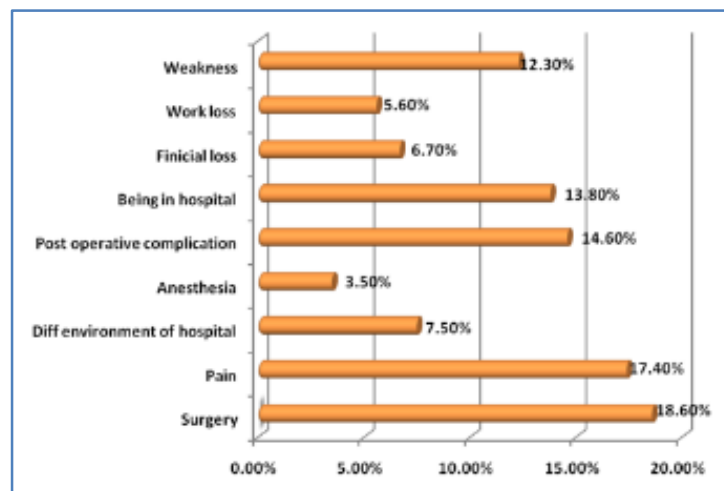
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Graph 1: Frequency of obtaining preoperative instructions from different sources



Graph 2: Frequency of fear among patients due to different factors

ORIGINAL ARTICLE

SEX	No	Mean	Std. Deviation	Sig.
Males	105	6.10	1.121	0.000
Females	168	6.60	.752	

Table 1: Showing mean scores of anxiety according to gender

Education	No	Mean	Std. Deviation	F	Sig.
Illiterate	63	7.50	.475	137.281	.000
Primary	91	7.00	.711	366.079	.000
Graduation	84	6.00	.711	404.289	.000
Post-graduation	35	5.33	.506	3.777	.024
Total	273	6.38	1.005		

Table 2: Showing mean scores of anxiety according to education status

Age	No	Mean	Std. Deviation	F	Sig.
20-30	42	5.67	.506	148.821	.000
31-40	63	5.50	.475	323.349	.000
41-50	80	6.25	.834	394.251	.000
51-60	88	6.50	.503	26.106	.000
Total	273	6.29	1.005		

Table 3: Showing mean scores of anxiety according to age

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.771(a)	.594	.592	.642
2	.786(b)	.618	.615	.623
3	.790(c)	.625	.620	.619

Table 4: Step wise multiple linear regression analysis with Anxiety level as a dependent variable

- a. Predictors:(Constant), Education.
- b. Predictors:(Constant), Education, sex.
- c. Predictors:(Constant), Education, sex, Age.

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