

Role of Informed Consent in Reducing Pre-Operative Anxiety

Aurang Zeb^{1*}, Muhammad Ziad², Irfan Ullah², Amina Bibi² and Abida Hussain²

1Assistant Professor, Rehman College of Nursing, phase 5 Hayatabad Peshawar pakistan

2 Student BSN, Rehman College of Nursing, phase 5 Hayatabad Peshawar Pakistan

*Corresponding author

Aurang Zeb, Assistant Professor, Rehman College of Nursing, phase 5 Hayatabad Peshawar Pakistan, E-Mail: aurang.zeb@rmi.edu.pk

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Abstract

Background: Preoperative anxiety is challenging concept in preoperative patients. It could reduce by various methods; one of them is informed consent in which information is provided to patients regarding anesthesia and surgical procedure, it also helps patients to make autonomous decision.

Objective: The aim this study was to identify the role of informed consent in preoperative anxiety, in surgical patients of both public and private tertiary care hospital Peshawar.

Method: A quasi experimental study design was carried out among preoperative patients of surgical units. The sample of 65 participants was selected through convenient sampling technique. First, the preoperative anxiety was measured with valid adopted questionnaire APAIS. Second, the informed consent was explained to patients and after this again preoperative anxiety was measured to see the effect of informed consent on preoperative anxiety.

Results: Among 65 participants 41 (63.1%) were males and 24 (36.9%) were females. 58 (89.2%) were married and 7 (10.8%) were unmarried. The mean age of participants was 49.92 ±16.76 years. 24 (36.9%) of the participants were uneducated, 17 (26.2%) primary, 13 (20.0%) secondary, 6 (9.2%) bachelor, and 5 (7.7%) had higher education. The participants were graded for preoperative anxiety, 3 (4.6%) had somewhat, 9 (13.8%) moderate, 27 (41.5%) moderately high, and 26 (40.0%) had extremely high anxiety. while the post-intervention anxiety grades were identified as 20 (30.8%) somewhat, 18 (27.7%) moderate, 17 (26.2%) moderately high, and 10 (15.4%) extremely high. The study shows that well explained informed consent reduced the patient pre-operative anxiety.

Conclusion: Preoperative anxiety is common phenomena experienced by patient undergoing through surgical procedures, informed consent is a tool that ensure the respect of patient autonomy and reduce their preoperative anxiety.

Keywords: Preoperative Anxiety, Informed Consent, Amsterdam Preoperative Anxiety and Information Scale (APAIS).

Introduction

Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may also have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat (Encyclopedia of Psychology). People often experience a general state of worry or fear before confronting something challenging such as a test, examination, recital, or interview. Here we will talk about preoperative anxiety which may be caused in patients prior to surgery [1]. Preoperative anxiety is a perfectly normal for the average person. In fact, a recent study of 239 patients preparing for surgery revealed more than half of the participants, 168 to be exact, showed strong signs of preoperative anxiety. It also found only 125 of the 239 patients going into surgery knew the type of surgery they'd be having [2].

A number of studies have been conducted on pre-operative anxiety and the methods to relieve it. But certain questions arise and need to be answered like, what the patients are afraid from? Do they want to be informed? Will this information help relieve their anxiety and what personal factors affect their anxiety or anesthetic choices?

The information regarding anesthesia and surgery is mostly given in the form of informed consent. Informed Consent is a document which contain following information

- Major risks discussed and mentioned in consent.
- The potential benefits of the procedure.
- Right of autonomous decision
- questions asked by patients and the answers given, patients' apparent understanding (especially if it is a young person, or one whose mental capacity or competency might be questioned)
- Any handout materials provided to the patient [3].

Preoperative anxiety is a challenging concept in the preoperative

care of patients. Most patients awaiting elective surgery experience anxiety and it is widely accepted as an expected response [4]. Anxiety is described as an unpleasant state of uneasiness or tension, which may be associated with abnormal hemodynamics as a consequence of sympathetic, parasympathetic, and endocrine stimulation. It begins as soon as the surgical procedure is planned and increases to maximal intensity at the moment of entering the hospital [5].

A study on “preoperative patient education to reduce anxiety”: was conducted in USA; a significant decline was noticed among the patients who received preoperative education as compare to others [6].

Study in Sri Lanka on “Preoperative anxiety in surgical patients - experience of a single unit” by using Amsterdam Preoperative Anxiety and Information Scale (APAIS) shows that preoperative anxiety has a significant effect on the outcome of anesthesia and surgery. The study highlighted that Females are more anxious than males and those who have never had surgery are more anxious than those who have had surgery [7].

A cross sectional study “Pre-operative anxiety in patients undergoing coronary artery bypass graft surgery” conducted by Manipal India; shows that patients undergoing through coronary artery bypass surgery experience the high level of pre-operative anxiety [8].

Randomized control study “preoperative information to improve satisfaction with cataract surgery” was conducted in Australia; This study demonstrated that a simple, inexpensive videotape showing patients what to expect from cataract surgery results in significant increases in patient understanding and satisfaction with the cataract surgery, as well as a decrease in anxiety [9].

Another experimental study “Effect of preoperative multimedia information on perioperative anxiety in patients undergoing procedures under regional anesthesia” in UK; shows that it reduces the anxiety of patients undergoing surgery under regional anesthesia [10].

A prospective study “The effects of informed consent format on preoperative anxiety in patients undergoing inferior third molar surgery” was done in USA; All forms of informed consent were useful in decreasing anxiety but oral format was most effective according to this study [11].

Methodology

Study design

Quasi experimental design was used for the study. Quasi experimental involves selecting groups, upon which a variable is tested, without any random pre-selection processes (Martyn Shuttle worth 2008). This study is selected because random selection in preoperative patients is not possible due to shortage of time.

Population and Setting

Both public and private sector hospitals were selected for conducting this study. The population of this study was preoperative patients of surgical units.

Sampling Technique

Preoperative patients of different surgeries are selected by using convenient sampling technique.

Sample Size

Sample size was calculated by Raosoft software. By using 5% of margin of error and 10% Non-response rate the calculated sample size was 53.

Inclusion Criteria

- Preoperative Adult patients
- Surgery under general or spinal anesthesia
- Exclusion Criteria
- Unconscious patients
- Patients on ventilator
- Patients with problem in speaking
- Mentally retarded

Data Collection Tool

An adopted and well organized questionnaire (Amsterdam Preoperative Anxiety and Information Scale, APAIS) was used for data collection. The questionnaire consisted of six questions about preoperative anxiety in patients.

Ethical Consideration

Approval for the data collection was taken from the hospitals Directors. An informed consent was presented and explained to each participant for his/her agreement as a participant. Anonymity was guaranteed to all the participants. Confidentiality of the data was assured only the researcher and supervisors’ had access.

Data Analysis

Data has been analyzed by using SPSS version 22. In descriptive statistics frequencies and percentages have been calculated for nominal and ordinal data where is mean and standard deviation have been calculated for continuous variables.

In inferential statistics paired T test has been applied to identify the effectiveness of informed consent on preoperative anxiety.

Results

Among 65 participants 41 (63.1%) were males and 24 (36.9%) were females. 58 (89.2%) were married and 7 (10.8%) were unmarried (Table-1). The mean age of participants was 49.92 +16.76 years. Name of hospital from where the patients were included 40 (60.5%) from RMI and 25 (38.5%) from HMC. 24 (36.9%) of the participants were uneducated, 17 (26.2%) primary, 13 (20.0%) secondary, 6 (9.2%) bachelor, and 5 (7.7%) had higher education (pie chart-1).

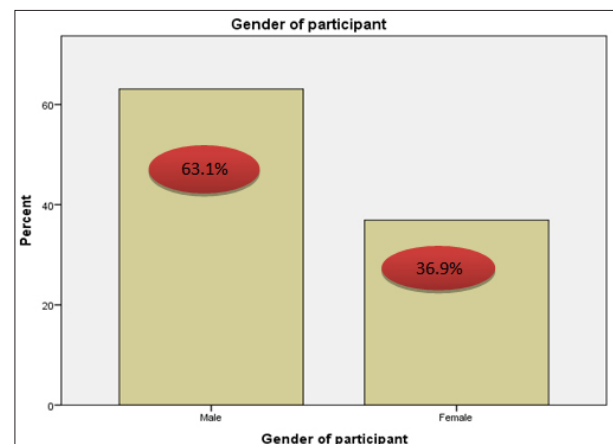
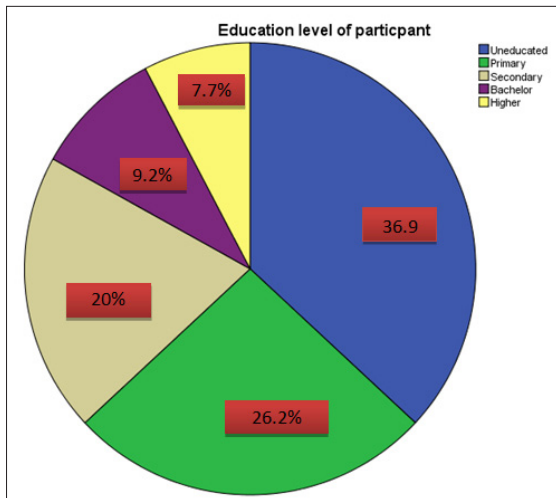


Table 1: Marital status

	Frequency	Percent
Married	58	89.2
Unmarried	7	10.8
Total	65	100.0

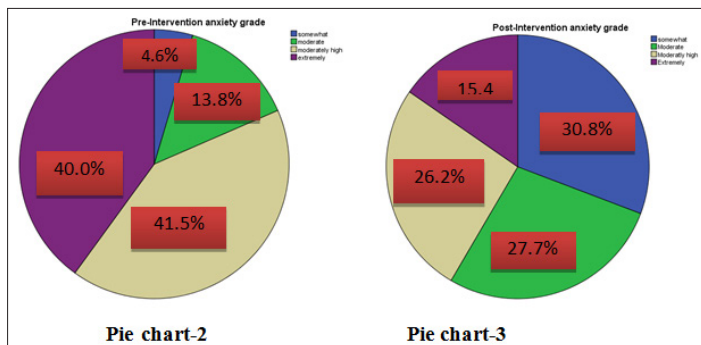


(Pie chart-1 showing education level of patients)

The participants were graded for preoperative anxiety, 3 (4.6%) had somewhat, 9 (13.8%) moderate, 27 (41.5%) moderately high, and 26 (40.0%) had extremely high anxiety. while the post-intervention anxiety grades were identified as 20 (30.8%) somewhat, 18 (27.7%) moderate, 17 (26.2%) moderately high, and 10 (15.4%) (Pie chart-2, Pie chart-3 and Table-3).

Comparison between pre-intervention & post-intervention anxiety (Table-3)

Anxiety level	Percentage of pre-intervention anxiety	Percentage of post-intervention anxiety
Somewhat	4.6	30.8
moderate	13.8	27.7
moderately	41.5	26.2
high	40.0	15.4
extremely Total	100.0	100.0



The mean pre-intervention anxiety score and post-intervention anxiety score with standard deviation was also calculated, where the mean of pre-intervention anxiety score was 22.62 +5.46, while the mean of post-intervention anxiety score was 16.71 +6.01 (Table-4).

Table: 4

	Pre-Intervention anxiety score	Post-Intervention anxiety score
Mean	22.62	16.71
Std. Deviation	5.468	6.017

In addition to that, Paired T test were applied to check the significance of informed consent with pre-operative anxiety. The result was highly significant with a p-value of 0.001; it shows that well explained informed consent reduced the patient pre-operative anxiety.

Discussion

Literature is available on the role of informed consent in pre-operative anxiety. Different studies have been conducted in different countries of the world on the same topic. Study on “preoperative patient education: can we improve satisfaction and reduce anxiety?” conducted in USA by Jaime Ortiza et al. (2013) consisting of two surveys [6]. First, survey did not include information regarding previous anesthesia experience or baseline anxiety levels, while the second one, contained information regarding anesthesia. That shows that a patient education hand-out written at the appropriate reading level and available in their primary language resulted in a significant improvement in patient satisfaction concerning their understanding of the anesthesiologist’s role, types of anesthesia, options for pain control, and instructions for the day of surgery.

Another study “Preoperative anxiety in surgical patients - experience of a single unit” was conducted in Sri Lanka by A.T. Matthias, D.N.Samarasekera. (2011), highlighted that preoperative anxiety has a significant effect on the outcome of an aesthesia and surgery [7]. They have also concluded that the anesthetist’s visit could reduce anxiety.

Randomized control study “preoperative information to improve satisfaction with cataract surgery” was done in Australia by C.K. Pager. (2004) in which information’s to patients were provided in videotape form [9]. Which also resulted in significant increase in patients understanding and satisfaction as well as decrease in anxiety?

Another experimental study “Effect of preoperative multimedia information on perioperative anxiety in patients undergoing procedures under regional anesthesia” was done in UK by H.A. Jjala et al. (2010) in which information were given on multimedia and resulted in decrease in anxiety [10]. They further said that this type of information can be easily delivered and can benefit many patients.

While in current shows that pre-operative anxiety level measured with the help of adopted questionnaire (APAIS), and then the information was provided to pre-operative patients regarding anesthesia and procedure. The informed consent was thoroughly explained, and then again anxiety level was measured. In analysis a significance decrease in the anxiety was obtained with the help of well explained informed consent. It shows that informed consent reduces the anxiety level among pre-operative patients [12].

Conclusion

Preoperative anxiety is common phenomena experienced by patient undergoing through surgical procedures, informed consent is a

tool that ensure the respect of patient autonomy and reduce their preoperative anxiety.

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