

# A Study on Patient Satisfaction Involving the role of Assigned Counselor for Cataract Surgery

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## ABSTRACT

**Objective:** To quantify the satisfaction fostered after counseling and association of outcomes in alleviation of pre-operative and post-operative anxiety, discomfort and risk apprehension whilst increasing the overall satisfaction among the cataract patients.

**Study Design:** Retrospective study

**Place and Duration of Study:** This study was conducted at the Bodla Eye Care, Multan and Multan Medical and Dental College, Multan from January 2019 to July 2019.

**Materials and Methods:** The study includes seventy patients from South Punjab with Pre-operative cataract. Out of these patients thirty-five were provided with the counseling services in addition to their routine treatment and were allocated as intervention group. The other thirty-five respondents were offered the routine clinical treatment but no counseling and were designated as control group.

**Results:** Prior and after the surgery, patients from intervention group employed convalescent sequel in terms of anxiety ( $P < .01$ ) and their current satisfaction with experience ( $P < .01$ ) together with the cooperativeness, which was found substantial in the intervention group, depicting the  $p < .01$ . On the contrary, patients in the intervention group had insignificant results in discomfort, risk apprehension and sleep quality in comparison to the respondents of the control group.

**Conclusion:** This causal study indicated to us that recruitment of an assigned counselor could significantly enhance patient's satisfaction and reduce patients' pre-operative anxiety, discomfort and risk apprehension levels. It emphasizes the relevance of patient education and counseling in a cataract surgery setting. This could help to improve overall patient satisfaction by meeting his informational needs.

**Key Words:** Anxiety, Counseling, Phacoemulsification, Satisfaction.

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## INTRODUCTION

In this retrospective study, we assessed the various effects of counseling for the treatment of patients from South Punjab with pre-operative cataract alongside anxiety. In the developed world, the cataract surgery has unfolded as a widespread surgical intervention whereas in the developing world, cataract is still the widespread root of blindness.<sup>1</sup> In the developing world patients usually prefer conventional cataract surgery, which costs less than phacoemulsification with IOL implantation.<sup>2</sup>

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Every Surgery is a startling event even when it's hardly considerable.<sup>3</sup> Several interventions are however practiced to alleviate perioperative torment and to vanquish adverse effects from the patients.<sup>4</sup> However, these intercessions have borne no fruit and still have restrictive effectiveness for the treatment of patients with pre-operative cataract. Alternative treatment is still needed for patients with pre-operative cataract to prevent and to treat their anxiety and fear before the surgery. Counseling is a potential intriguing candidate to treat such condition.<sup>5</sup> Perhaps it is well documented that lack of preparation for surgery, postoperative symptomology, and negative thoughts and beliefs are significantly associated with psychiatric comorbidity<sup>6-7</sup>. Thus, the purpose of the pre surgical counseling period is to pacify surgical anxiety and psychological pedagogy for surgical interventions, to confer rational apprehension of the suggested surgery and prognosis, to make the patients informed of surgical procedure and postsurgical complications, and to direct the patient on operation theater environment. Presently, very little research has been implied upon the perioperative nervousness before a cataract surgery, whilst literature has described that patients with preoperative cataract (PC) are often wretched with anxiety and fear.<sup>8-9</sup> The

lack of awareness in patients and their high threshold of tolerance have led to an inadequate emphasis on counseling before cataract surgery. People with lesser knowledge and families with low socioeconomic groups are also unmindful. Studies also reported that providing preoperative information has positive effects and reduces postoperative stress, pain, and anxiety in surgical patients.<sup>10</sup>

## MATERIALS AND METHODS

This is a retrospective study that was performed in the affiliated hospital of Multan Medical and Dental College, Multan from January 2019 to July 2019. A signed Informed consent was also provided to the respondent patients.

The study includes seventy patients from South Punjab with Pre-operative cataract. Out of these patients thirty-five were provided with the counseling services in addition to their routine treatment and were allocated as intervention group. The other thirty-five respondents were offered the routine clinical treatment but no counseling and were designated as control group. All of the results were analyzed prior and former to the surgery on SPSS version 20.

Patients were included presuming they were at waiting list of cataract surgery, aged eighteen years or more, no prior history of cataract surgery (including fellow eye), and with an educational ability to listen and write Urdu. The patients were taken from middle class socio economic status. Nevertheless, patients were excluded in the event that they suffered from any severe disease such cancer, any psychiatric or neurologic conditions such as dementia; in addition, respondents having adequate information about procedure and its characteristics were excluded.

A consistent meticulous treatment i.e phacoemulsification (Alcon, Infinity) was given to all the respondents included in the research. Besides this the intervention group also underwent regular counseling. The patients were given information about the structure of the eye as well as adjacent structures, and the advantages of intraocular lens implants (IOLs) over conventional aphakic corrections; prognosis for vision was also reviewed by the ophthalmologist. In this way, while assuring the patient of the need for surgery or treatment, they were not quite inaccurate in assessing the prognosis for visual recovery. Additionally, patients were told to make psychological preparations to relieve anxiety. Such counseling sessions were done at the time of first consultation as well as before surgery.

The patient satisfaction was measured pre operatively on a structured questionnaire that had the questions on anxiety scales.<sup>[11]</sup> It included (1) anxiety before surgery (2) level of discomfort (3) risk apprehension, and (4) current level of satisfaction (CSE). These parameters were estimated individually in the structured

questionnaire. Hence the credibility and authenticity of questionnaire have been established.

Post-operative evaluation included the same questionnaire with additional questions about sleep quality, cooperation during procedure, and visual functions, whereby visual function was estimated for the impairment caused due to the surgery.<sup>12</sup> It was authenticated as well. An additional scale was employed to estimate the cooperativeness of patients during surgery, with 1 score indicating total uncooperativeness to score 7 indicating total cooperativeness. This scale was also authenticated by the previous study.<sup>13</sup> Additionally, sleep quality was measured before the surgery.

Anxiety scales, visual function as well as sleep quality were measured, at baseline, 1 week prior and former the surgery. However, cooperativeness whilst the surgery period was measured after the surgery.

## RESULTS

Over a time period of 6 months, 77 patients (n=35 control and n=35 intervention) were recruited in this study. Out of which 7 were lost up in the follow ups. The mean age of patients in the intervention group was 70.6 (10.5) and the mean age of control group was 71.3 (11.1). There were 20 (57.1%) males in intervention group and 18 (51.4%) in the control group, whereas there were 15 (42.9%) females patients in intervention group and 17 (48.6%) in the control group. The comparison of characteristics of all included patients was analyzed and no significant differences had been reported between the two groups. Before implicating any kind of intervention on the patients, the analysis of both groups gave us the statistics having an almost equal level of risk, anxiety, CSE (current satisfaction with experience) and discomfort.

Before and after the surgery, patients in the intervention group employed convalescent development in anxiety (P<.01) (table 1 and table 2), alongside current satisfaction with experience (P<.01) (table 1 and table 2) , both measured by a structured questionnaire, as well as the co cooperativeness among the two groups was found greater in the intervention group 6.0(4.4, 7.0) in comparison to the control group 4.5 (2.8, 5.9), depicting a difference of 1.5 (0.9, 2.1) and the p <.01 (table 3). On the contrary, patients in the intervention group had insignificant results in discomfort (before, P=.51, after, P=.16), and risk (before, P=.47, after, P=.28,) and sleep quality (before, P=.32, and after, P=.20,) before and after the surgery and in comparison to control group as well (table 1 and table 2). The changes in visual functions before and after the surgery were significant (p=0.02) however no significant difference was reported concerning the visual outcomes when comparing the two groups (p=0.3).

**Table No.1: Change in satisfaction scale 1 week pre surgery (change from baseline)**

| Satisfaction score | Intervention group (n=35) | Control group (n=35) | Difference | p-value |
|--------------------|---------------------------|----------------------|------------|---------|
| Anxiety            | -2.35                     | -0.95                | -1.30      | <0.01   |
| Discomfort         | -0.90                     | -0.55                | -0.30      | 0.51    |
| Risk               | -0.75                     | -0.45                | -0.30      | 0.47    |
| CSE                | -1.60                     | -0.60                | -1.10      | <0.01   |

**Table No.2: Change in satisfaction after surgery (change from baseline)**

| Satisfaction score | Intervention group (n=35) | Control group (n=35) | Difference | p-value |
|--------------------|---------------------------|----------------------|------------|---------|
| Anxiety            | -5.40                     | -3.21                | -2.4       | <0.01   |
| Discomfort         | -2.35                     | -1.80                | -0.6       | 0.16    |
| Risk               | -2.20                     | -1.72                | -0.5       | 0.28    |
| CSE                | -2.90                     | -1.73                | -1.2       | <0.01   |

Data presented as mean  $\pm$  standard deviation, CSE=current satisfaction with experience.

## DISCUSSION

Currently, no specific study has been done in south Punjab pointing towards the effects of pre-operative cataract counseling using standardized anxiety scores. Thus, to our best knowledge, this retrospective study is the first of its kind in determining the effects of counseling on pre-operative cataract patients of south Punjab. We hereby report that providing counseling to patients before the cataract surgery not only relieves their anxiety but also enhances their cooperation and satisfaction during surgery.

The high rate of success achieved by modern cataract surgery has created a situation in which patient expectations are very high; in most cases, such expectations are fulfilled. Yet we have seen highest levels of anxiety pre-operatively in the patients.<sup>14</sup> This finding is in accordance to study done by Foggitt. Other studies focusing on patient education showed rather low levels of knowledge with respect to cataract, and misperceptions in cataract patients who needed surgery, in addition to limited information retention.<sup>15-17</sup>

Various other studies have reported the effects of counseling as well as patient education before any elective surgery inclusive of cataract surgery.<sup>[18]</sup> Morrell and some others in their study had demonstrated the effects of patient education as well as exposure towards the therapeutic goals of cataract surgery.<sup>[19]</sup> The result of that study is congruent to our study. Foreshadowing the positive effects of counseling prior to a cataract surgery.<sup>20</sup> in order to administer the patient satisfaction and expectations another study employed a videotaping method in a day stay cataract surgery.<sup>21</sup> these results also demonstrated the patient satisfaction and reduction in anxiety.

The results of our study are somehow similar to the previous studies. According to our study the patients in the intervention group were found less anxious more

cooperative and satisfied at the end as compared to the control group. Besides the patients in the intervention group were corresponding better during surgery. No difference was however shown in terms of sleep, visual functions, the risks and discomfort levels between the two groups.

This retrospective study has various constraints as well strengths. This study is a pristine study of its kind being administered in south Punjab and it provides potential evidence for the clinical practice. As far as the limitations are concerned the patients were given both the counseling as well as the treatment for pre-operative cataract rather than the counseling alone, however, the treatment among the patients was regular and constant.

The results of this study might have been altered due to smaller sample size and the study is a nonrandomized controlled trial, with higher risks of selection bias. Hence, all of these limitations should be avoided in future study.

## CONCLUSION

This study has demonstrated the effects of counseling on pre-operative cataract patients and it is therefore found that counseling enhances their satisfaction and alleviates anxiety in patients and increases their cooperativeness during the surgery. Nevertheless, supplemental studies are needed to reiterate the results of this study.

### Author's Contribution:

|                            |  |
|----------------------------|--|
| Concept & Design of Study: | Ali Afzal Bodla                        |
| Drafting:                  | Muhammad Awais Ashraf                  |
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| Revisiting Critically:     | Ali Afzal Bodla, Muhammad Awais Ashraf |
| Final Approval of version: | Ali Afzal Bodla                        |

**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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