

Effect of Pre-Operative Education on Level of Anxiety in Patients Undergoing Cataract Surgery

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Abstract

Objective: To determine the effects of pre-operative education on the level of anxiety in patients undergoing cataract surgery by comparing the anxiety level among interventional and control group.

Study design: Experimental post-test design

Patients and Method: This cross-sectional study was conducted at ophthalmic department of Mayo Hospital Lahore. A total of 100 cataract patients were selected from by purposive non-probability sampling technique and divided into two groups (control & interventional) by dividing the days. Data was analyzed by using Hospital Anxiety and Depression Scale (HADS).

Result: Out of total 100 patients, 50 were included in control group and 50 were in interventional group. In control group there were 26(52%) male and 24(48%) females and in interventional group 25(50%) were male and 25(50%) were females. Among controls, there was no patient with normal score of anxiety level, 8 (16%) patients were with mild score, 38(76%) patients were with moderate score and 4(8%) patients were with severe score. In interventional group, there were 38(76%) patients with normal score, 11(22%) patients were with mild score, only 1(2%) patient was with moderate score and no patient was with severe score.

Conclusion: A good relationship was found between pre-operative education and reduction of anxiety level in patients undergoing cataract surgery.

Key Words: Anxiety, Cataract, Patient education, Pre-operative, Surgery

Introduction

Cataract remains the leading cause of blindness globally. According to the latest assessment, 51% of blindness occurs due to cataract, which represents about 20 million people. This is a very serious issue as cataract is easily curable through a simple surgery, which is today available in the whole world.¹⁻⁵ Many improvements in the development and use of microsurgical instruments and surgical techniques were made in recent years. Phacoemulsification is one of those improvements which become a procedure of choice for all routine cataract surgeries.^{6-8,1} Presently over 85% of all cataract surgeries in the world are performed using phacoemulsification with topical/local anaesthesia. That is performed with a small corneal incision and requires no sutures. These techniques enable the surgeon to perform this procedure in 30 minutes or less and with no pain, having immediate visual improvement.⁹⁻¹¹

It is well documented that hospitalization for surgery is associated with increased anxiety.^{12,13} Perioperative anxiety is a known entity and highly acknowledged.^{14,15} For most people, anxiety is an unpleasant emotion and can be a reason of avoidance or refusal of operation.^{16,17} It can adversely affect anaesthetic induction and patient recovery as well as decrease patient satisfaction, and perceived quality of care. In order to reduce anxiety of patients various interventions can be used such as preoperative patient's education and reassurance, relaxation techniques, touch therapy, mild sedation and music therapy etc.^{2,3,18,13,19} Present study was planned to see if providing information and giving education to patients about their treatment can reduce anxiety and aid recovery.

Patients and Method

A sample of 100 cataract patients were selected from the ophthalmic department of Mayo Hospital Lahore by using purposive non-probability sampling technique and divided into two groups (control & interventional) by dividing the

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days. Data was collected by using Hospital Anxiety and Depression Scale (HADS).¹⁷

The data was entered and analyzed by SPSS version IBM-20 and was represented in the form of figures, tables and percentages. Mean with standard deviation was calculated for quantitative variables and percentages and frequencies were computed for categorical variables. Chi-square and Student t-test was used to compare the effect of pre-operative education on level of anxiety in patients undergoing cataract surgery. A p-value of ≤ 0.05 was considered as statistically significant.

Result

Among controls there was no patient with normal score of anxiety level, 8(16%) patients were with mild score, 38(76%) patients were with moderate score and 4(8%) patients were with severe score. In interventional group there were 38(76%) patients with normal score, 11(22%) patients with mild score, only 1(2%) patient with moderate score and no patient was with severe score (Table 1).

		Study group		p-value
		Control (n=50) No (%)	Interventional (n=50) No (%)	
Scoring	Normal	0(0%)	38(76%)	0.000
	Mild	8(16%)	11(22%)	
	Moderate	38(76%)	1(2%)	
	Severe	4(8%)	0(0%)	

	Control n=50	Interventional Group n=50	p-value
Mean + SD	12.30 \pm 1.95	6.28 \pm 2.27	0.000

According to HAD scale, in interventional group mean score was lower as compared to control group patients (Table 2).

Discussion

A current experimental study has explored the effect of pre-operative education on level of anxiety of patients undergoing cataract surgery. It has provided strong evidence, that pre-operative education has a positive effect on decreasing anxiety of patients during surgery. Other

studies also have also shown that pre-operative information provides beneficial health results and also helps in avoiding post-operative complications.^{1,9,10,13,16}

There were 100 patients included in our study in which 50 were control and 50 were from interventional group. The male to female ratio was same in interventional and in control group. Most of the patients recruited in our study were old, as the mean age of the controls was sixty-five years and that of interventional group. In another study told mean age was above fifty years that was quite similar to this study as well as female gender was; contrary to our results; found to be more prone to cataract.¹ Other studies support the same, and define the implication of this knowledge in our setting.^{9,11,15,16} The pre-operative patient's guidelines that was used in current study, should be given to cataract-surgery-patients before surgery, it may help them to understand the surgical procedure and ultimately reduction of their anxiety level. It is thus strongly suggested that there is a relationship between pre-operative education and reduction of anxiety level in patients undergoing cataract surgery. Pre-operative information helped the interventional group to be less anxious, less frightened from the procedure, avoiding worrying thoughts and fear of mis-happenings. Most of the patients strongly agreed that pre-operative education is helpful against anxiety and beneficial for patient's outcomes. They also strongly agreed that providing pre-operative education in Pakistan is imperative for all cataract patients. Patients in interventional group experienced less anxiety, short hospital stay and higher satisfaction regarding surgical procedure they underwent and less intra-operative complications.

Conclusion

A good relationship was found between pre-operative education and reduction of anxiety level in patients undergoing cataract surgery.

Conflict of Interest

This study has no conflict of interest as declared by any author

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Authorship Contribution:

Author 1: Conception, Synthesis and Planning of the research

Author 2,4,5: Active participation in active methodology

Author 3 Interpretation, analysis and discussion