



A STUDY TO ASSESS THE EFFECTIVENESS OF PRE-OPERATIVE TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF POST - OPERATIVE COMPLICATIONS AMONG PATIENTS UNDERGOING CATARACT SURGERY AT SRM GENERAL HOSPITAL, KATTANKULATHUR.

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Abstract

Background: A cataract is a opacity in the normally transparent crystalline lens of the eye. This opacity can cause a decrease in vision and may lead to eventual blindness. The prevalence of cataract increases with often occurs earlier in life, and there is more of it. Globally, cataract has remained the major cause of blindness over the years. Cataract is one of the most common causes of visual impairment in the world. In India 80% of the blindness is due to cataract, Various modifiable risk factors associated with cataract include UV exposure, diabetes, hypertension, body mass index (BMI), drug usage, smoking and socioeconomic factors; but advancing age is the single most important risk factor for cataract.

Objectives: To assess the pre- test and post- test level of knowledge and practice regarding prevention of postoperative complications among patients undergoing cataract surgery

To determine the effectiveness of pre-operative teaching program me on knowledge and practice regarding prevention of postoperative complications among patients undergoing cataract surgery

To correlate the pre and post test level of knowledge and practice regarding prevention of postoperative complications among patients undergoing cataract surgery

To associate the post test level of knowledge and practice with their demographic variables among patients undergoing cataract surgery

Method: Research approach was quantitative approach, The research design was adopted quasi experimental two group pre test post test Design, The sample size was 100 patients undergoing cataract surgery were selected by using Non probability purposive sampling technique at SRM GH, Kattankulathur, patients were divided in to two groups, such as 50 samples in experimental group and 50 samples in control group ,Pre test was conducted for experimental and control group , on day of before surgery to assess the level of knowledge by using structured questionnaire, level of practice assessed by observational checklist , pre operative teaching on prevention of post operative complications and booklet was given only to experimental group , after 2 weeks post test was conducted for both experimental and control group. After completion of the study booklet on prevention of postoperative complications was given to the control group. The data was collected from the sample were tabulated and analysed and interpreted using both descriptive and inferential statistical method.

Result: In experimental group pre-test p value 0.378 is not less than 0.05 and is not significant, post test p value 0.007 is less than 0.01 and is highly significant at 1% level hence we can say that there is high significant positive correlation ($r=0.378$) between level knowledge and practice scores regarding prevention of postoperative complications, It means that, both knowledge and practice are interdependent and if knowledge is increasing then the practice is also increasing simultaneously. In control group pre test p value 0.117 is not less than 0.05 and is not significant ,post test p value 0.998 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level of knowledge and practice scores regarding prevention of postoperative complications.

Conclusion: The result of the study was concluded, Preoperative teaching formulated by the investigator was effective in improving the knowledge and practice of patients undergoing cataract surgery regarding prevention of Postoperative complications.

Keywords: Cataract, complications, eye care , knowledge of patients.

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1. Introduction

A cataract is a cloudy or opaque lens, on visual inspection the lens appears gray or milky (2005) , according to the World Health Organization, cataract leading cause of blindness in the world.

Cataract is a lens opacity or cloudiness, cataract can develop in one or both eyes at any age as a result of variety of causes such as cigarette smoking, sunlight and ionizing radiation, diabetes, obesity, and eye injuries can increase the risk of cataract, painless, blurry vision is characteristic of cataracts and the snellan visual acuity test, ophthalmoscopy and slit lamp biomicroscopic examination are used to establish the degree of cataract formation, if reduced vision from cataract does not interfere with normal activities, so cataract surgery is performed to improve visual functioning, the cataract surgery are phacoemulsification, lens replacement and the nurses responsibility of providing preoperative care, post operative care and promoting home and community based care.

2. Materials and Methods

The experimental group analysis revealed that majority of the patients undergoing cataract surgery had Inadequate level of knowledge 50 (100%) in the pre test level and 46 (92%) had adequate level of knowledge in post test.

The experimental group analysis revealed that majority of the patients undergoing cataract surgery had poor practice 20 (40%) in the pre test level and 43 (86 %) had good practice in post test, concluded that there was a significant improvement in the level of knowledge and practice regarding prevention of postoperative complications on cataract surgery

The control group analysis revealed that majority of the patients undergoing cataract surgery had inadequate level of knowledge 49 (98%) in the pre test level and 1 (2 %) had adequate level of knowledge in post test

The control group analysis revealed that majority of the patients undergoing cataract surgery had poor practice 23 (46%) in the pre test level and 2 (4%) had good practice in post test , concluded that there was a no significant improvement in the level of knowledge and practice regarding prevention of postoperative complications on cataract surgery.

3. Results and Discussion

Results

In experimental group pre-test p value 0.378 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level knowledge and practice scores regarding prevention of postoperative complications.

In experimental group post test p value 0.007 is less than 0.01 and is highly significant at 1% level hence we can say that there is high significant positive correlation ($r=0.378$) between level knowledge and practice scores regarding prevention of postoperative complications, It means that, both knowledge and practice are interdependent and if knowledge is increasing then the practice is also increasing simultaneously.

In control group pre test p value 0.117 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level of knowledge and practice scores regarding prevention of postoperative complications.

In control group post test p value 0.998 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level of knowledge and practice scores regarding prevention of postoperative complications

Hence the research hypothesis **RH1** stated that -there is significant relationship between level of knowledge and practice regarding prevention of complications on cataract surgery.

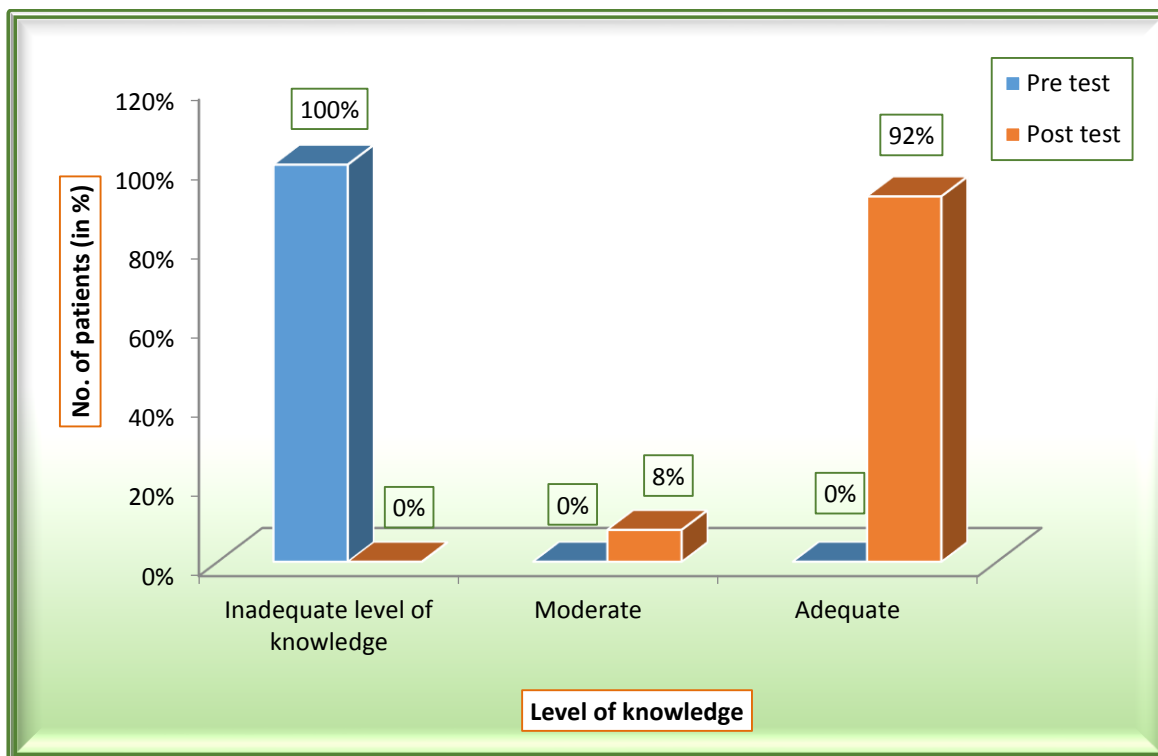


Fig 4.2.1 Multiple bar diagram showing the percentage pre and post test level of knowledge in experimental group

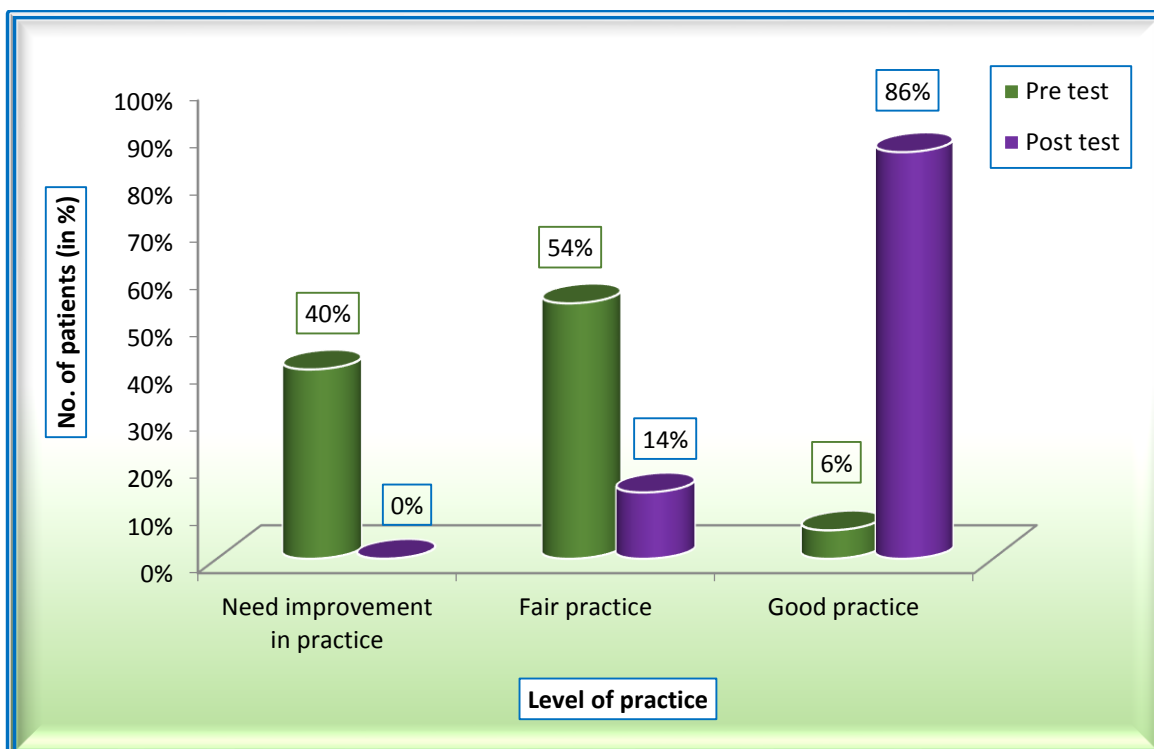


Fig 4.2.2: Multiple bar diagram showing the percentage pre and post test level of practice in experimental group (n=100)

S. No.	Test	N	Mean	SD	T value	df	P value
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1	Pre test	50	9.62	3.162	-10.313	49	0.000**
2	Post test	50	14.02	4.757			

** - Significant at 1% level * - Significant at 5% level

The control group analysis revealed that majority of the patients undergoing cataract surgery had inadequate level of knowledge 49 (98%) in the pre test level and 1 (2 %) had adequate level of knowledge in control group.

The p value 0.000 is less than 0.01 and is highly significant at 1% level hence we can say that there

is high significant difference between the mean pre test knowledge score and mean post test knowledge , while post test mean score (14.02) is greater than the pre test mean score (9.62) hence we can conclude that there is significant improvement level of knowledge on prevention of postoperative complications.

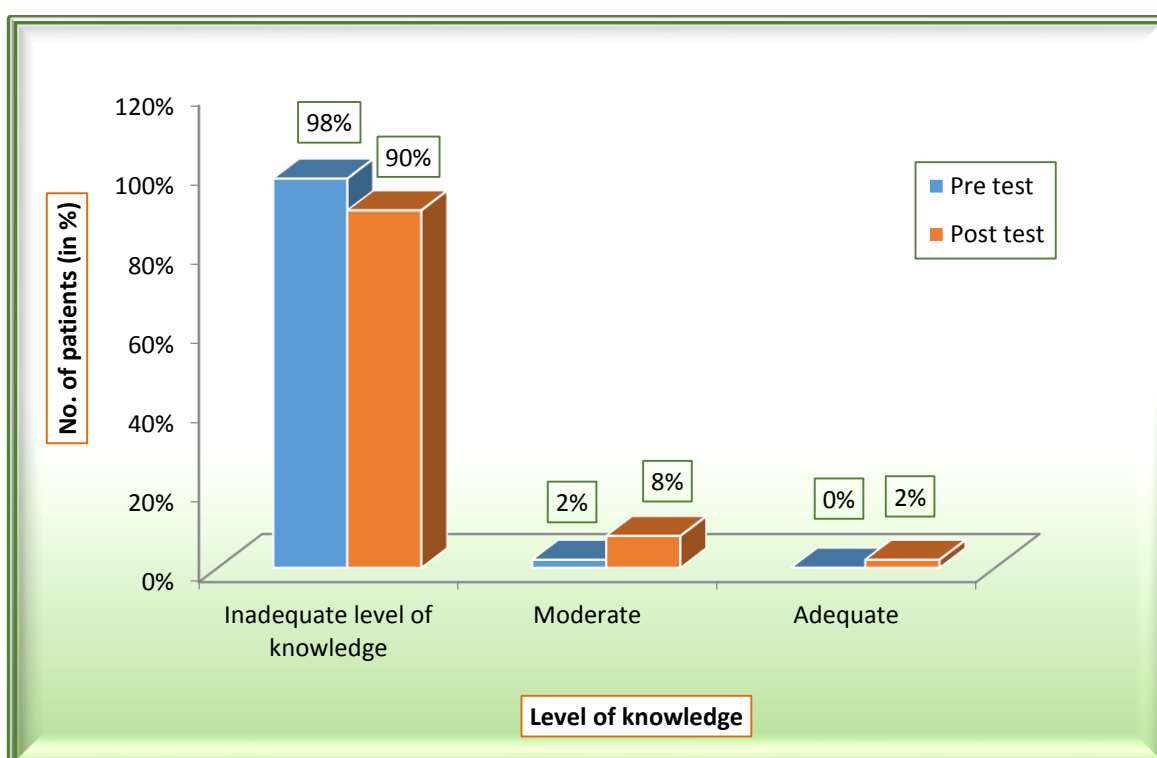


Fig 4.2.3 :Multiple bar diagram showing the percentage pre and post test level of knowledge in control group

Table 4.2.4 : Pre test and post test level of practice on prevention of postoperative complications on cataract surgery among control group

(n=100)							
S. No.	Test	N	Mean	SD	T value	df	P value
1	Pre test	50	7.44	2.517	-5.838	49	0.000**
2	Post test	50	8.02	2.334			

** - Significant at 1% level * - Significant at 5% level

The control group analysis analysis revealed that majority of the patients undergoing cataract surgery had poor practice 23 (46%) in the pre test level and 2 (4%) had good practice post test .

The p value 0.000 is less than 0.01 and is highly significant at 1% level hence we can say that there is high significant difference between the mean pre test practice score and mean post test practice score, while post test mean score is (8.02) greater

than the pre test mean score is (7.44) hence we can conclude that there is significant improvement

level of practice on prevention of postoperative complications.

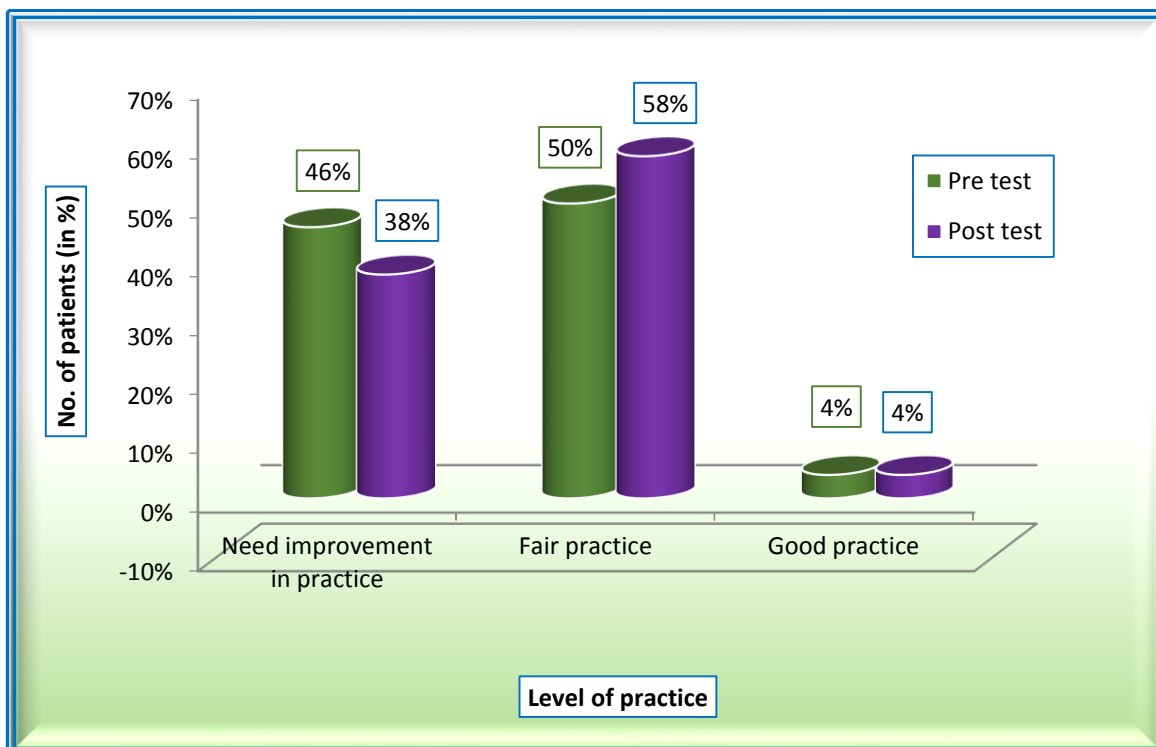


Fig 4.2.4 :Multiple bar diagram showing the percentage pre and post test level of practice in control group

4. Discussion

Comparison of experimental and control group level of knowledge on prevention of

postoperative complications among patients undergoing cataract surgery
Unpaired t test OR Independent t test

S. No.	Test	N	Mean	SD	T value	df	P value
1	Experimental	50	35.86	2.030	-29.856	98	0.000**
2	Control	50	14.02	4.757			

**-. Significant at 1% level

*-. Significant at 5% level

In experimental group post test mean score (35.86) is greater than the post test mean score of control group is (14.02) hence we can conclude that there is high significant improvement in level of knowledge on prevention of postoperative complications.

The p value 0.000 is less than 0.01 and is highly significant at 1% level hence we can say that there is high significant difference between the mean post test level of knowledge score of control and

mean post test knowledge score of experimental groups.

Comparison of experimental and control group level of practice on prevention of postoperative complications among patients undergoing cataract surgery
Unpaired t test OR Independent t test (n=100)

S. No.	Test	N	Mean	SD	T value	df	P value
1	Control	50	8.02	2.334	-12.114	98	0.000**

2	Experimental	50	12.58	1.279		
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** - Significant at 1% level * - Significant at 5% level

In experimental group post test mean score (12.58) is greater than the post test mean score of control group is (8.02) hence we can conclude that there is high significant improvement in practice on prevention of postoperative complications.

The p value 0.000 is less than 0.01 and is highly significant at 1% level hence we can say that there is high significant difference between the mean post test level of practice score of control group

and mean post test level of practice score of experimental groups.

Correlation of pre-test scores of knowledge and practice regarding prevention of postoperative complications on cataract surgery among experimental group
(Karl Pearson's coefficient of correlation)

(n=100)

S. No.	Variable	N	Mean	SD	R Value	P Value
1	Knowledge	50	10.92	2.633	-0.127	0.378
2	Practice	50	7.94	2.325		

* - Significant at 5% level ** - Significant at 1% level

In experimental group pre-test p value 0.378 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level knowledge and practice scores regarding prevention of postoperative complications.

Correlation of post test scores of knowledge and practice regarding prevention of postoperative complications on cataract surgery among experimental group
(Karl Pearson's coefficient of correlation)

(n=100)

S. No.	Variable	N	Mean	SD	R Value	P Value
1	Knowledge	50	35.86	2.030	0.378	0.007**
2	Practice	50	12.58	1.279		

* - Significant at 5% level ** - Significant at 1% level

In experimental group post test p value 0.007 is less than 0.01 and is highly significant at 1% level hence we can say that there is high significant positive correlation ($r=0.378$) between level knowledge and practice scores regarding prevention of postoperative complications, It means that, both knowledge and practice are interdependent and if knowledge is increasing then the practice is also increasing simultaneously.

Correlation of pre test scores of knowledge and practice regarding prevention of postoperative complications on cataract surgery among control group
(Karl Pearson's coefficient of correlation)

(n=100)

S. No.	Variable	N	Mean	SD	R Value	P Value
1	Knowledge	50	9.62	3.162	-0.225	0.117

2	Practice	50	7.44	2.517		
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*-Significant at 5% level **-Significant at 1% level

In control group pre test p value 0.117 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level of knowledge and practice scores regarding prevention of postoperative complications.

Correlation of post-test scores of knowledge and practice regarding prevention of postoperative complications on cataract surgery among control group (Karl Pearson's coefficient of correlation)

(n=100)

S. No.	Variable	N	Mean	SD	R Value	P Value
1	Knowledge	50	14.02	4.757	0.002	0.998
2	Practice	50	8.02	2.334		

*-Significant at 5% level **-Significant at 1% level

In control group post test p value 0.998 is not less than 0.05 and is not significant at 5% level hence we can say that there is no significant correlation between level of knowledge and practice scores regarding prevention of postoperative complications.

5. CONCLUSION

The study assessed the effectiveness of Preoperative teaching programme on level knowledge and practice regarding prevention of postoperative complications among patients undergoing cataract surgery at SRM General Hospital , Kattankulathur. The result of the study concluded that preoperative teaching programme formulated by the investigator was effective in improving the level of knowledge and practice of postoperative care regarding prevention of post operative complications on cataract surgery .

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