

## Original Research Article

# Emotional and psychological factors in patients prior to cataract surgery

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**Received:** 04 September 2018

**Accepted:** 29 September 2018

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### ABSTRACT

**Background:** Cataract constitutes as the leading cause of blindness. Lack of information about the surgical procedure and results of surgery in cataract patients tend to show high levels of anxiety. Preoperative educational intervention planning is necessary to prepare patients for cataract surgery. The aim of present study was to identify emotional factors related to daily difficulties among patients having cataract.

**Methods:** The present cross-sectional study was conducted over a period of 10 months by means of a preformed pilot tested questionnaire on patients who had been screened for cataract in various eye camps and admitted for cataract surgery in the upgraded Department of Ophthalmology, Government Medical College, Jammu. All the questions were explained to participants in their local language for better understanding and those who were willing to participate, were requested to fill the semi-structure pilot tested questionnaire form with informed consent.

**Results:** Around 75% of participants reported daily difficulties due to the ocular conditions, of which walking (79.6%) followed by doing housework (77.8%) were the most frequently reported difficulties. About 75% of the participants reported fearing the surgical procedure. Regarding the level of acceptance of cataract surgery 13.9% reported being very much afraid. With respect to the surgical procedure, doubt as to the outcome was reported by 22.2%. When cataract surgery was compared to other kinds of surgery, 31.9% thought it was better to undergo eye surgery whereas 48.6% had not given any opinion on the matter.

**Conclusions:** Preoperative orientation is necessary in order to ease the suffering caused by surgery and render satisfaction with the treatment. Thus, patient should be prepared for the procedure, information regarding common outcomes and risks of surgery reduces anxiety and improves patient satisfaction following cataract surgery.

**Keywords:** Cataract, Eye camp, Psychological factors, Visual loss

### INTRODUCTION

Blindness has a significant weight on family, community, social and health service.<sup>1</sup> Cataract constitutes major cause of blindness in many third world countries which could be because of lack of access for surgery, lack of proper diet, constant exposure to sunlight in their occupation as well as biomass fuel use, genetic factors are also important. Compared to the Western counterpart

Asian populations reveal higher prevalence of cataract. In the developing countries like India cataract constitutes as the leading cause of blindness as many patients with cataract do not have access to hospitals and surgery.<sup>2</sup> More than 3/4<sup>th</sup> of Indian populations live in rural area which are away from medical facilities, eye care services need to be planned and executed in these areas. An essential strategy for such population is transportation to higher centre for surgeries after screening through

outreach programmes.<sup>1</sup> Though specialized treatment services are available and visual function may be recovered, there are still barriers to overcome which range from access, economical, psychological, socio-cultural influencing factors, the individual's attitudes and perceptions, as well as fear, lack of confidence and insecurity.<sup>3,4</sup>

Lack of information about the surgical procedure and also expectations regarding results in cataract patients tend to show high levels of anxiety during the pre and postoperative periods as well as during surgery. Information on medical procedures is one of the most important factors regarding patient satisfaction.

In order to lower levels of anxiety, lower complication rates, length of stay in hospital, less pain and better patient satisfaction preoperative orientation is necessary. Therefore, to guide the target population about eye disorders, multiple aspects of scientific knowledge on cataract training in specialized centers is recommended.<sup>5</sup>

The present study had been conducted to identify emotional factors related to daily difficulties among patients with cataracts as educational intervention planning is necessary in order to prepare patients for cataract surgery.

**METHODS**

The present cross-sectional study was conducted from October 2017 to July 2018 by means of a preformed pilot tested questionnaire on patients who had been admitted for cataract surgery in the upgraded department of Ophthalmology, Government Medical College, Jammu. All the patients who had been participated were screened for cataract surgery in various eye camps in Jammu province. Negative feelings regarding cataract surgery were assessed in the questionnaire through reported fear and emotional meaning attributed to the fact (distress, anger, sadness etc.).

All the questions were explained to participants in their local language for better understanding. The informed written consent from all the participants were undertaken before inclusion in the current study.

**Inclusion criteria**

- Individuals of both sexes.
- Aged above 20 years.
- Diagnosed with cataracts with surgical indication.

**Exclusion criteria**

- Uncooperative patients.
- Patient refused to participate in study.
- Patients who had a complicated cataract, traumatic cataract, uveitis cataract or other corneal comorbidities.

All the patients underwent complete ophthalmological examination as under:

*History*

The complete ophthalmic history as, diminution of vision, its onset, duration and progress, redness of eyes, pain, watering or any discharge from eyes, intolerance to light, ocular surgery etc. Relevant personal medical history as trauma, steroid exposure or drug intake, diabetes mellitus, asthma, hypertension, tuberculosis, past history of any other surgery etc. Family history was also collected from all patients.

*Ocular examination*

Best corrected visual acuity (BCVA) was measured using Snellen's visual acuity chart, IOP was measured by applanation tonometer, gonioscopy was done to see status of angle/any other pathology involving angle, detailed slit lamp examination was done before and after pupillary dilatation to grade the nucleus and to look for the pseudoexfoliative deposits on the cornea, iris, pupillary margin and on the anterior capsule of the lens, dilated fundus examination, blood pressure measurement and laboratory tests like haemoglobin, bleeding time, clotting time, fasting blood sugar, urine examination etc.

*Statistical analysis*

The data was analysed using statistical software MS Excel/SPSS version 17.0 for windows. Data presented as percentage (%) as discussed appropriate for quantitative and qualitative variables.

**RESULTS**

Total of 72 patients participated and provided answers for all the questions in the study. The data was analyzed. Following results were found in the present study.

Total of 75% of patients reported daily difficulties whereas 25% didn't reported any difficulty. Among those who reported, various daily difficulties due to the ocular conditions were as doing housework (77.8%), walking (79.6%) and watching TV (72.2%) etc. (Table 1).

**Table 1: Daily difficulties as a result of cataract.**

Difficulties	Number	Percentage (%)
None reported	18	25
Reported*	54	75
Difficulties in:	n=54	
Housework activities	42	77.8
Walking	43	79.6
Watching TV	39	72.2
Others	25	46.3

\*multiple answers given

As for fear of cataract surgery multiple responses were given, 75% of the patients reported fearing the surgical procedure, 50% feared visual loss and 6.9% feared death during surgery (Table 2).

**Table 2: Fear of cataract surgery.**

Fear of surgery*	Number	Percentages
Of surgical procedures	54	75
Of loosing eye sight	36	50
Of dying during surgery	5	6.9

\*multiple answers given

Regarding the level of acceptance of cataract surgery, 13.9% reported being very much afraid but accepted while 29.2% reported being somewhat afraid but accepted and 56.9% felt no fear at all (Table 3).

**Table 3: Acceptance of cataract surgery.**

Acceptance of surgery	Number	Percentages (%)
Very much afraid but accepted	10	13.9
Somewhat afraid but accepted	21	29.2
Not afraid but accepted	41	56.9

With respect to the surgical procedure, various answers were given as doubt as to the outcome (22.2%), distress/anxiety (15.3%), sadness (25%), happiness (30.6%), and anger (6.9%) (Table 4).

**Table 4: Importance/feeling undergoing cataract surgery.**

Importance/feeling	Number	Percentages
Distress	11	15.3
Doubt as to outcome of surgery	16	22.2
Anger for needing to undergo surgery	5	6.9
Sadness	18	25
Happiness	22	30.6

When comparing cataract surgery to other kinds of surgery, 31.9% thought it was better to undergo eye surgery, 16.7% said both situations were the same, 2.8% thought that cataract surgery was worse, and 48.6% had no opinion on the matter (Table 5).

**Table 5: Importance attributed to cataract surgery.**

When compared to other type of surgeries operating cataract is ?	Number	Percentages (%)
Worst	2	2.8
Same	12	16.7
Better	23	31.9
No opinion	35	48.6

While performing daily activities cataract impose visual limitations, suggest quality of life impairment from personal limitations. The perceptions about the disease depend on sociocultural influences and the degree of limitation of performing daily activities. If surgical interventions are performed earlier and also due to advances in surgical techniques both recovery and results would have been very satisfactory. Also, it has been observed that the patient’s improvement is inversely proportional to the severity of his/her visual damage in the preoperative period. Thus, other important barriers include possible reluctance to seek treatment and/or lack of opportunity to undergo surgery.<sup>5</sup>

**DISCUSSION**

The inevitable result of the aging process is cataract, which is the commonest misconception, ultimately leads to a consequent acceptance of blindness and we can do nothing about it. Such way of thinking influences the individual’s behavior and hinders access to surgery. Even if these barriers are overcome, there are still other factors that create apprehension and insecurity about the surgical procedure.<sup>5</sup> Considering all these aspects, it is appropriate to investigate the reasons for the fear of cataract surgery.

In the present study, daily difficulties as a result of cataract were reported by 75 % participants while 25% reported no difficulty. Various daily difficulties due to the ocular condition reported were doing housework (77.8%), walking (79.6%), watching TV (72.2%) etc. In this study patients who did not reported difficulty might be due to reason that their other eye is having good vision (pseudophakic, no ARMD etc). Marback R et al, also reported that 82.7% of patients reported daily difficulty which include doing housework (64.8%), walking (72.5%), and watching TV (64.8%).<sup>5</sup>

As for fear of cataract surgery multiple responses were given by the participants in the present study, 75% of the patients reported fearing the surgical procedure, 50% feared visual loss and 6.9% feared death during surgery. Highest number of patients reported fearing surgical procedure might be due to lack of orientation in the preoperative period, fear of pain during the procedure, each person’s strategy to cope. Anesthesia usually produces more fear than the surgery itself. This feeling can be linked to the idea of losing control, absence, disconnection, separation and death. The participation of the doctor and other professionals in explaining, understanding and calming down the patient is extremely important for reducing such consequences.<sup>5</sup> Oliveira RSCS et al, in their study also assessed fears and found that the presence of fear of surgery (28.8%), fear of going blind (55.1%) and fear of feeling pain (40.8%).<sup>6</sup> Marback R et al, also reported in their study about 33.3% of the patients fearing the surgical procedure, 54.0% feared visual loss and 12.7% feared death during surgery.<sup>5</sup>

Regarding the level of fear and acceptance of cataract surgery, 13.9% reported being very much afraid but accepted while 56.9% felt no fear at all and accepted cataract surgery. Marback R et al, also reported in their study the level of fear and acceptance and results were as 12.7% reported being very much afraid while 29.1% reported being somewhat afraid and 58.2% felt no fear at all.<sup>5</sup>

With respect to the surgical procedure in the present study, 22.2% reported doubt as to the outcome of surgery. It is due to poor communication between doctor and patient. Medical orientation tends to reduce anxiety and reinforce proper defence strategies. It is expected that the patient should be prepared for the procedure, feeling capable of working with the team for a good outcome. More information reduces surgery cancellations.<sup>5</sup> Pager CK in a study showed that preoperative videotape explaining to patients the sensations they are likely to experience during surgery, common outcomes and risks regarding surgery reduces anxiety and improves patient satisfaction following cataract surgery.<sup>7</sup> Morrell G, in a study showed that favorable outcomes were 20% higher in those who received information than in those who received no information whatsoever. Thus, Lack or inadequate information may contribute to anxiety and lead to surgical complications.<sup>8</sup> Marback R et al, also found that a significant proportion of the patients i.e. 32.7% declared having doubts as to the outcome of the surgical procedure in their study.<sup>5</sup>

In the present study, while comparing cataract surgery to other kinds of surgery, 31.9% thought it was better to undergo eye surgery, 16.7% said both situations were the same, 2.8% thought that cataract surgery was worse and 48.6% had no opinion on the matter. Various reasons regarding this were given as those who answered “better” to undergo eye surgery was due to reason that they will get vision after surgery and short stay at hospital, Those who answered “both situations were the same” were much afraid of surgery, Those who had given “no opinion” on the matter were never had any experience regarding any surgery. Marback R et al, also found various opinion on comparing cataract surgery to other kinds of surgery as 47.3% thought it was better to undergo eye surgery, 5.5% said both situations were the same, 4.5% thought that cataract surgery was worse and 42.7% had no opinion on the matter.<sup>5</sup>

Pager CK et al, in a study showed discrepancies between what doctors consider to be priorities for patients and what the patients themselves actually consider as priorities. This may be due to the fact that either patients did not feel comfortable in clearly expressing their priorities to the doctors or the doctors did not have enough time to discover the patients priorities (anxiety levels, and personal standpoints).<sup>9</sup>

The major factors of concerns producing anxiety regarding the success of surgery are requirement of

staying immobile under a bright light and being covered with surgical drapes during the procedure, hearing the surgeon talking during the surgery and fear of breaking the incision. However, the surgical procedure itself i.e. the eye is incised and opened apparently caused no anxiety. On the other hand, a good doctor-patient-relationship and confidence in the ophthalmologist along with knowledge of successful surgery were the major anxiety relieving factors.<sup>10</sup>

In general, patients prefer oral to written or interactive information. Oral information seems to be more effective due to the interpersonal contact.<sup>11</sup>

## CONCLUSION

From present study, we may conclude that preoperative orientation is necessary in order to ease the suffering caused by surgery and render satisfaction with the treatment. Thus, patient should be prepared for the procedure, feeling capable of working with the team for a good outcome. Preoperative videotape explaining to patients common outcomes and risks regarding surgery reduces anxiety and improves patient satisfaction following cataract surgery.

## Recommendations

Authors recommend that there is need to re-evaluate the health care system due to an excess demand for health care services in contrasts with an insufficient number of professionals. Consequently, tiredness frequently observed in these professionals, leads to inadequate communication between the health care professional and the patient which interferes directly with the patient's treatment. This educational approach also brings a drop in cancellations of surgical procedures as well as a decrease in surgical complications.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

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**Cite this article as:** Manhas A, Manhas RS, Manhas GS, Gupta D. Emotional and psychological factors in patients prior to cataract surgery. *Int J Res Med Sci* 2018;6:3726-30.