Pak J Ophthalmol 2017, Vol. 33, No. 2

A Survey of Patient Satisfaction with LASIK

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Purpose: To assess patient satisfaction following laser in situ keratomileusis (LASIK).

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Karachi

Study Design: Descriptive, cross-sectional study.

Correspondence to: Sharmen Akram Aga Khan University Hospital Place and Duration of Study: Laser vision Center, Karachi, from Jan 2012 to April 2016.

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Material and Methods: All patients who underwent LAISK procedure in one or both eyes by two surgeons from Jan 2012 to April 2016 at a refractive center (Laser Vision) in Karachi and agreed to participate in the survey were included. These patients were surveyed telephonically to establish their degree of satisfaction with LASIK and to enquire about postoperative use of glasses, and symptoms of night vision problems and if they would recommend this procedure to others. Patient anonymity was assured. Descriptive statistics were calculated using SPSS version 19.

Results: A total of 52 people who had undergone LAISK procedure in one or both eyes were interviewed. 12 (23.1%) were males and 40 (76.9%) were females. Their mean age was 29.83 ± 5.14 years. In our survey, the overall spectacle independence for distance was 90.4%. Visual disturbance was reported by 19.2% of participants. The satisfaction level of patients post Lasik was 86.5%.

Conclusion: Our results are comparable to worldwide studies, which also show a high post—Lasik patient satisfaction.

Key words: LASIK, patient satisfaction, spectacle independence, surveys

aser In Situ Keratomileusis (LASIK) surgery is one of the most common refractive procedures performed in developed countries where more than half of the adult population has refractive errors¹. Its popularity is due to its pain-free nature, early visual recovery, predictability of results and low rate of complications²⁻⁶. Multiple studies have been conducted regarding patient satisfaction after Lasik procedure17-12. In order to understand patient satisfaction due to this procedure various factors contributing to it must be looked at such as unaided improved cosmetic appearance, vision, participation in sport and other daily activities^{9,13}.

To our best of knowledge no such study has been documented in Pakistan. The aim of this study was to assess patient satisfaction after LASIK procedure performed at a refractive center in Karachi.

MATERIAL AND METHODS

This was a cross-sectional survey. All patients, aged 20 years or older and of either gender, who underwent LAISK procedure in one or both eyes by two surgeons from Jan 2012 to April 2016 at a refractive center (Laser vision) in Karachi were included in this study. After obtaining informed verbal consent, a structured telephone interview was conducted with the participants to collect data on socio-demographics (age, gender, occupation), spectacle/contact lens use(pre and post Lasik), visual disturbances such as halos, starburst and glare (pre- and post-Lasik) and satisfaction (satisfied/not satisfied). Of the two hundred patients called, only 52 patients agreed to be interviewed.

IBM SPSS Statistics version 19 (Statistical Package for Social Sciences) was used to enter and analyze the data. This was a descriptive analysis. Means and SDs were calculated to describe quantitative data. Counts and proportions were computed to describe categorical data.

RESULTS

A total of 52 people were interviewed. Their mean age was 29.83 ± 5.14 years (range 20-50 years). 12 (23.1%) were males and 40 (76.9%) were females. An overall spectacle independence for distance was reported to be 90.4% (Table 1). Visual disturbance such as halos, starburst and glare post Lasik was reported to be 19.2%. Daily activities post Lasik got affected in 21.2% of the patients. However, the overall satisfaction level post-Lasik was 86.5% (Table 1) and in spite of daily activities being affected, many participants were

satisfied (Table 2). Overall 88.5% participants said they would recommend LASIK surgery to others (Figure 1).

Table 1: Spectacle independence, visual disturbance, effect on daily activities and patients' satisfaction after LASIK surgery (n = 52).

| Characteristic | Frequency | Percent | |
|------------------------|-----------|---------|--|
| Spectacle independence | | | |
| Yes | 47 | 90.4 | |
| No | 5 | 9.6 | |
| Visual disturbance | | | |
| Yes | 10 | 19.2 | |
| No | 42 | 80.8 | |
| Daily activities | | | |
| Not effected | 41 | 78.8 | |
| Affected | 11 | 21.2 | |
| Satisfaction | | | |
| Satisfied | 45 | 86.5 | |
| Not satisfied | 7 | 13.5 | |

DISCUSSION

Multiple studies have been reported on patient satisfaction and various surgical procedures. Eye being one of the six senses patient, satisfaction, following any eye surgery is of utmost importance. As refractive surgery especially the Lasik procedure deals with normal eye, the satisfaction level assessment becomes very important following this procedure. The LASIK surgery is a safe procedure but not risk free and rare complications when reported by a small number of dissatisfied patients can give an unbalanced negative attitude about the surgical procedure¹⁴⁻¹⁶. Therefore to evaluate genuine patient satisfaction many surveys have been done^{1,7,8,17-20}.

Table 2: Satisfaction among those whose daily activities got affected.

| | Satisfaction | | |
|----------------|-----------------------|------------------------------|----|
| Characteristic | Satisfied Freq (%) | Not Satisfied Freq (%) | P* |

| Daily activities | Un- affected | 38 (92.7) | 3 (7.3) | 0.029 |
|---------------------|-----------------|-----------|----------|-------|
| | Got affected | 7 (63.6) | 4 (36.4) | |

*P-value calculated using Fisher's exact test

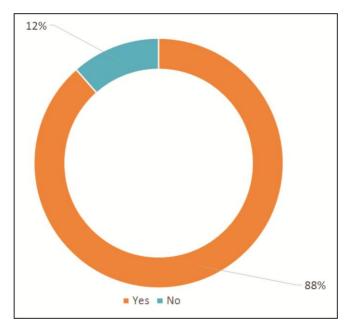


Figure 1: When asked if they would recommend LASIK to others (n=52).

It is important to understand the various reasons for the satisfaction post–Lasik such as unaided good vision, cosmesis^{1,12,13,21}. Current estimates of patient satisfaction with LASIK range from 82% to 98%^{17,19}. Our study showed 86.5% patient satisfaction post–Lasik, with 88.5% of the patients willing to recommend the procedure (Figure 1).

19.2% patient reported visual disturbances such as halos, starburst and glare, similar symptoms were also reported in other studies in the range of 12-57% of patient^{18,22}. In spite of these symptoms, the satisfaction levels remained high 84.6%.

In our study 90.4% of the patients reported spectacle independence which was the main factor for patient satisfaction-after the procedure. Various reasons for patient satisfaction have been discussed in different studies; an unaided vision seems to be one of the most important factors^{7,12}.

Factor creating bias in such a study is when the physician administers satisfaction questionnaires. To

minimize this bias the survey was conducted by a resident and a medical student.

Limitations to our study were that the survey was done over a long follow up period. Long-term follow-up results in difficult recall in accurately comparing the patient's preoperative and present quality of vision. Another limitation of our study is that objective quantification of night vision problems is still a challenge and limits accuracy study results. 19.2% of our patients reported visual disturbances however in spite of this satisfaction level was high and daily activities were not affected in most. Our results are comparable to worldwide studies, which also show a high post—Lasik patient satisfaction.

ACKNOWLEDGEMENT

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