

## Cataract Surgical Outcome in Lagos University Teaching Hospital, Lagos, Nigeria: A Five year Review

Aribaba OT, Ilo OT, Adenekan AO, Musa KO, Abikoye TM, Oguntoye FO, Onakoya AO and Akinsola FB

Department of Ophthalmology, Lagos University Teaching Hospital, Lagos, Nigeria

**Corresponding author:** Aribaba OT,  
Email: tade.aribaba@gmail.com

**Introduction:** Cataract is the leading cause of blindness globally and in Sub-Saharan Africa.<sup>1,2</sup> Cataract surgical rate in most of Africa is less than 500/million population.<sup>3</sup> Good cataract surgical outcome may remove patient's barriers to uptake of cataract surgical service and improve surgeon confidence. The WHO recommends good outcomes in at least 80% of operated eyes and that no more than 5 % should have a poor outcome.<sup>4</sup>

**Objective:** To determine the surgical outcome of cataract surgeries done at the Guinness Eye Centre, Lagos University Teaching Hospital (GEC, LUTH) between January 2012 - December 2016.

**Methods:** This is a retrospective study. Case notes of adult patients (>18 years) who had cataract surgery between January 2012 and

December 2016 were obtained and information retrieved include patient age, gender, ocular co-morbidities, type of cataract surgery and level of surgeon (Consultant Ophthalmologist or trainee) and visual acuity. Visual acuity was recorded preoperatively, at discharge, 1-3 weeks post-operatively, 4-11 weeks post-operatively and >12 weeks post-operatively. Visual outcome after surgery was graded as good (VA >6/18), fair (VA <6/18 - 6/60) and poor (VA < 6/60).

**Results:** The records of 465 patients were obtained with age range 18 - 124 years and Male: female ratio of 1.2:1. The mean age of the respondents was 62.5± 14.8 years with the median age of 65 years and modal age of 62 years respectively. When grouped by decade of life, the largest single category was of patients aged 61 - 70 years with 158 patients (34%). Presenting VA ranged from NPL to 6/9. A total of 188 eyes (40.4%) had ocular co-morbidities, the most predominant of which was glaucoma (10.8%). The predominant type of surgery done in 387 patients (84%) was Small Incision Cataract Surgery with Posterior chamber intraocular lens implantation (SICS + PCIOL). Other procedures performed were Extracapsular Capsular Extraction (ECCE) + PCIOL, SICS only, ECCE only, SICS + Anterior Chamber Intraocular Lens implantation (ACIOL).

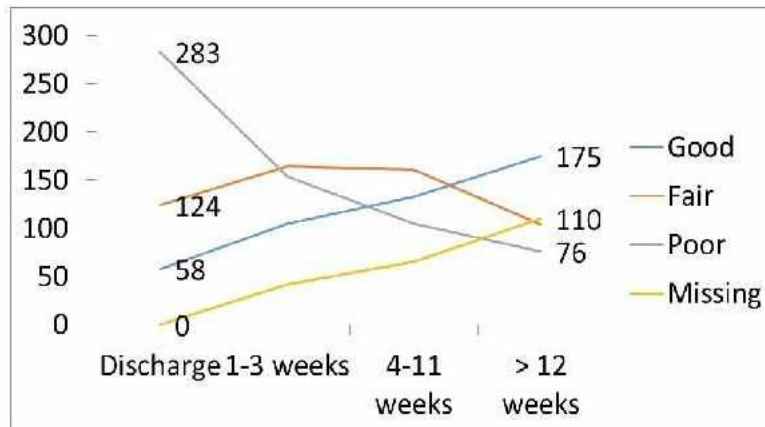


Fig. 1: Visual outcome post cataract surgery

**Table 1:** Factors associated with visual outcome (bivariate analyses)

	Discharge	1-3 weeks	4-11 weeks	>12 weeks	Best Outcome
Operation Complication	<b>P = 0.012</b>	<b>P&lt;0.001</b>	<b>P=0.021</b>	<b>P&lt;0.001</b>	<b>P&lt;0.001</b>
Ocular co-morbidity	P=0.919	P=0.601	P=.115	P=.639	P=0.452
Age	P=0.232	<b>P=0.004</b>	<b>p=&lt;0.001</b>	<b>P=0.060</b>	<b>P&lt;0.001</b>
Sex	P=0.232	P=0.239	P=0.525	P=0.209	P=0.885
Presenting VA	P=0.113	P=0.456	P=0.429	<b>P=0.004</b>	<b>P&lt;0.001</b>
Surgeon	<b>P&lt;0.001</b>	p=0.079	P=0.559	P=0.200	P=0.579
Surgery	<b>P=0.003</b>	<b>P&lt;0.001</b>	<b>P=0.005</b>	<b>P=0.001</b>	<b>P&lt;0.001</b>

**Discussion:** Eyes that had SICS + PCIOL had the best outcomes post-operatively which is the default cataract surgical procedure for uncomplicated cataract cases. Other procedures were performed due to pre-operative and intra-operative complications and this could explain the poorer outcomes. Seventy-six patients (21.4%) had poor outcomes after 12 weeks, attributable to pre-operative co-morbidities, lack of spectacle correction and operative complications. The main limitation to this study was the retrospective aspect with data loss and incomplete documentation leading to reduced subject's evaluation over the study period of five years

**Conclusion:** The cataract surgical outcome in GEC, LUTH is still below the WHO recommendation and are attributable to ocular co-morbidities and postoperative complications. Improved spectacle coverage, surgical skills and technique, better patient selection may improve the outcomes.

#### References

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