



## Service Priorities and Programmes Electronic Presentations

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### **Clinical Outcomes of Cataract Surgery in Very Elderly Adults**

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#### **Introduction**

With the advancement of health care, the average life expectancy of the population is increasing. The number of very elderly adults ( $\geq 90$  year-old) awaiting cataract surgery is expected to increase. The clinical outcomes of cataract surgeries in individuals younger than 90 have been reported in the literature, but data regarding clinical outcomes in very elderly adults are limited

#### **Objectives**

To investigate the clinical outcomes of cataract surgery elderly adults.

#### **Methodology**

DESIGN: Retrospective cohort study. SETTING: Two clustered hospitals.  
PARTICIPANTS: Two hundred seven individuals aged 90 and older who underwent cataract surgery for primary senile cataracts. MEASUREMENTS: Best-corrected preoperative and post-operative Snellen visual acuity, type of cataract, surgical techniques, preoperative systemic or ocular comorbidities, and intraoperative and postoperative complications were assessed. Improvement of visual acuity was defined as a decrease in logMAR acuity of 0.1. Factors associated with visual outcome within 6 months after surgery were identified using logistic regression modeling. The duration of postoperative survival was calculated.

#### **Result**

In the 207 participants (mean age 92.0 +/- 2.1), 79.7% achieved visual improvement after cataract surgery. Forty-eight percent (mean age 97.4 +/- 2.8) were alive on December 31, 2012. The most common systemic comorbidities were hypertension (66.2%), diabetes mellitus (25.1%), and myocardial infarction (19.8%). Age-related macular degeneration (ARMD) (15.9%), glaucoma (10.6%), and myopic degeneration (5.3%) were the three most common ocular comorbidities. Uncomplicated cataract surgery was performed in 87.0% cases. The most common complications were vitreous loss (8.2%), posterior capsular rupture (7.2%), and zonular rupture (4.8%).

Participants with ARMD ( $P = .001$ , odds ratio (OR) = 4.77, 95% confidence interval (CI) = 1.86–12.26) and vitreous loss ( $P = .001$ , OR = 12.86, 95% CI = 2.71– 61.10) were less likely to achieve postoperative visual improvement. CONCLUSION: Despite a high prevalence of systemic and ocular comorbidities in very elderly adults, good clinical outcomes of cataract surgery were attainable. ARMD and vitreous loss were associated with a lower chance of postoperative visual improvement.