

**ABSTRACT**

**Refractive Outcome after Cataract Surgery in Hospital Keningau, Sabah**

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**Introduction:** The success of cataract surgery is accessed by the improvement in visual acuity and accuracy of post-operation refractive outcome against the pre-operation refractive target. Hence, the benchmark of 85% of patients achieving a final spherical equivalent within 1D of the desired target is used to monitor the refractive outcome. Meanwhile, the unaided visual acuity threshold of 6/12 after cataract operation is chosen as a yardstick because it allows patients to perform instrumental activities of daily living (IADL) independently without relying on spectacles. **Objective:** The purpose of this study is to report the refractive outcome after phacoemulsification and intraocular lens implantation. **Methodology:** A cross-sectional study is conducted on the patient records of all cataract surgeries that have been performed in Hospital Keningau, Sabah from January to April 2018. This study includes all patients who had undergone immersion A scan, phacoemulsification cataract surgery and attended a session of post-operative refraction within 90 days from the operation date in Hospital Keningau. **Results:** We performed 140 cataract surgeries during the study period with 113 (80.7%) cases fulfilled the inclusion criteria. 84.1% of the included cases achieved a final spherical equivalent within 1D of the desired target. Meanwhile, there were only 46.9% of patients had acquired unaided visual acuity of 6/12 or better after cataract operation. There are no significant association between the refractive outcome and the cataract related

factors studied such as preexisting ocular comorbidity, intra-operation complication, accuracy of A constant, K reading and formula for intraocular lens (IOL) calculation used as well as IOL implanted. **Conclusion:** The post-

operation refractive outcome fell short of the benchmark. Further investigation should be performed to assess for other key factors that may improve cataract refractive outcome.