

**KEUNGGULAN OPERASI KATARAK FAKOEMULSIFIKASI DIBANDINGKAN
DENGAN *EXTRACAPSULAR CATARACT EXTRACTION*: SEBUAH TINJAUAN
LITERATUR**



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ABSTRACT

SUPERIORITY OF CATARACT SURGERY PHACOEMULSIFICATION COMPARED TO EXTRACAPSULAR CATARACT EXTRACTION: LITERATURE REVIEW

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Cataract and uncorrected refractive disease as the main cause for visual impairment and blindness worldwide, mostly found in countries with lower income rate. Senile cataract covers 90% of all cataract cases and can be detected in patients aged 45 year-old but the risk increases significantly in age 65 and above. Senile cataract patients varies in cataract maturity upon examination, such as insipient, immature, mature, and hiperature cataract. Frequently chosen cataract therapies in Indonesia are phacoemulsification and extracapsular cataract extraction (ECCE). This literature review explains how phacoemulsification is the better therapy for age-related cataract compared to ECCE.

Author did literature searches on five different electronic databases (Pubmed, BJO, AJO, JCRS, dan Science Direct). Articles were selected using 9 combinations of keywords with provisions such as articles should be available in full text, in English, published within the last 20 years, and were conducted as clinnical trial or randomized controlled trial. Criteria of patients are age-related cataract patients, with or without comorbidities, and was operated using PHACO or ECCE method. A total of 62 articles were reviewed along 13 other miscellaneous articles (obtained not using systematical search).

Author concluded the superiority of phacoemulsification compared to ECCE using indicators such as visual outcome, intraoperative and postoperative complications, quality of life, and cost efficacy. Best visual outcome was obtained using phacoemulsification method, with WHO's recommended cataract surgery success criteria. Both methods has risks causing complications intra- and postoperative, although ECCE has higher risk of causing vitreous loss, posterior capsule rupture, ocular inflammation, and surgically induced astigmatism. Cataract surgery overall improves visual-related quality of life in patients regardless of the surgery method used. However, phacoemulsification has better cost efficacy than ECCE because of better outcome postoperatively and faster recovery. Further research using medical record data from hospitals in Indonesia comparing mentioned indicators for both methods is recommended, as well as similar research about manual small incission cataract surgery.

Keywords: *Senile cataract, phacoemulsification, ECCE, visual outcome, complications, quality of life, cost efficacy.*