

Editorial: Cataract auditing as a tool for improving effective cataract surgical coverage

Globally, there is an estimated 216.6 million people with visual impairment (80% uncertainty interval [UI] 98.5–395.1 million)¹. Of these, 39 million people are blind (80% UI 12.9–65.4 million)¹. Cataract is the leading cause of blindness globally, affecting approximately 12.6 million people in 2015 (80% UI 3.4–28.7)¹. Cataract is also the cause of one quarter of moderate and severe vision impairment, affecting an estimated 52.6 million people (80% UI 18.2–109.6)¹. Cataract surgery is the only definitive management for cataract with an estimated 25 million surgical cases per year. It is a highly effective sight restoration intervention.

There are several measures used to monitor the effectiveness of cataract surgery such as cataract surgical rate, cataract surgical coverage, sight restoration rate and others. In 2017, the concept of effective cataract surgical coverage started to take shape. This refers to proportion of people aged 50 years or older with operated cataract or operable cataract who have a good postoperative presenting visual acuity of 6/18 or better. According to the Lancet Global Health Commission on Global Eye Health: beyond vision 2020, the median effective cataract surgical coverage for 48 countries was less than 50% for an outcome of 6/18 or better and an operable cataract threshold of worse than 6/60 between 2000–2019. This would be much less than the WHO recommended target of 80%. Much of the skewing towards the worse outcomes was in Sub Saharan Africa (SSA)².

Several things are needed to improve effective cataract surgical coverage in many parts of the world. One mechanism for which this can be done is continuous quality improvement through cataract surgical outcomes monitoring. Monitoring cataract outcomes is an important activity to ensure quality and safety of the cataract surgical services. Routine monitoring of pre-operative vision, operative and post-operative data of each operated patient calculates the visual outcome and assesses the quality of cataract surgery. It is assumed that encouraging eye surgeons to monitor their own results, over time, will lead to better outcomes of cataract surgery.

In Uganda, we have piloted the “Sustained Routine Cataract Auditing (SROCA)” intervention to improve cataract outcomes. The overall purpose of this project is to test the feasibility of introducing a cataract outcome monitoring practice in Uganda and the impact of this intervention on the quality and safety of cataract surgery. This work is part of a larger 3-year project “Increasing Equitable Access to Effective Cataract Services in West, and Southwest Uganda.” funded by Fred Hollows Foundation in partnership with CBM and implemented by Ruharo Mission Hospital and Mbarara University and Referral Hospital Eye Centre (MURHEC).

SROCA draws lessons from the maternal mortality audits in Uganda to provide a safe, positive, and non-judgmental environment of objectively reviewing,

discussing and sharing cataract surgery outcomes. It is currently being piloted at the major high volume cataract centers in Southwestern Uganda. The platform includes routine collection of data of all adult patients who undergo cataract surgery at the participating hospitals. Customized monthly audit reports are presented to the clinical teams based on the WHO classifications of outcome. In addition, the worst 5th percentile cases are discussed to explore reasons for their poor outcomes and the teams are facilitated to discuss a continuous quality improvement strategy. The participating hospitals have an opportunity to meet at quarterly audit network meetings to share lessons and best practices. The trend of outcomes will be monitored annually to monitor improvement over time.

The individual hospitals will be able to have candid review meetings and utilize their data to improve their clinical practice into better patient outcomes. At the hospital level, this will result into peer-to-peer adoption of improved surgical technique and medical management, improved case selection, revised protocols for intraoperative and postoperative management. As a network, the participating hospitals will discuss overall results and share lessons and challenges to support each other through this shared learning process.

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