

INTRODUCTION

Estimates of the National Eye Survey in 1996 reveals that cataract is a significant cause of visual impairment in Malaysia, accounting for 39% and 36% of the causes of blindness and low vision respectively. There is a huge backlog of patients requiring cataract surgery. However information on cataract surgical services with regards to patient demography, quality of service and surgical outcomes is limited in this country. These information are essential for the planning, implementation and evaluation of cataract surgery services.

Cataract surgery registry refers to the ongoing systematic collection, analysis and interpretation of data related to cataract surgery. The National Cataract Surgery Registry (NCSR) was established on the 1st of January 2002. The registry is sponsored by both the Ophthalmology Service and the Clinical Research Centre of the Ministry of Health (MOH). Till date twenty-three hospitals have participated as source data producers (SDP) to the NCSR. They are the departments of Ophthalmology of the MOH hospitals (21 centres), Universiti Sains Malaysia and Kem Terendak of the Ministry of Defence. The Advisory Committee oversees the operations of the NCSR.

This report is a preliminary analysis of data collected on 3016 patients who underwent cataract surgery from January to March 2002, received from 22 source data producers. All patients whose complete records were received by the Cataract Surgery Registry Unit (CSRU) by June 2002 were included in the analysis. Data from one SDP were not analysed due to incomplete return.

On behalf of the CSRU, I would like to thank all the 23 hospitals that have participated in the NCSR since January 2002. We hope that we will continue to get the full support from all government and university hospitals and in the future the participation of private eye care providers. It is through this cooperation that we can obtain a true reflection of cataract surgery performed in Malaysia.

Dr. Mariam Ismail

Chairman

NCSR Advisory Committee

METHOD

1. OBJECTIVES

The objectives of the National Cataract Surgery Registry are to:

- Determine the frequency and distribution of cataract surgery in Malaysia.
- Determine the outcomes, and factors influencing outcomes of cataract surgery.
- Evaluate cataract surgery services.
- Stimulate and facilitate research on cataract and its management.

2. COVERAGE

There are 29 Ophthalmology departments under Ministry of Health (MOH), one under Ministry of Defence and 3 Ophthalmology departments in the local universities. Of these public operated ophthalmology departments, 23 registered as source data producers from January 2002. This gave a coverage rate of 70% in the initial phase. If only the MOH hospitals were taken into account, the coverage rate was 72%.

3. DISEASE REGISTRATION METHODS

The organizational structure of NCSR consists of sponsors, advisory committee, cataract surgery registry unit (CSRU), and source data producers and target groups/users. The Ophthalmology Service and the Clinical Research Centre, both of the MOH, jointly sponsor the registry. The NCSR is governed by an advisory committee who oversees the operations of registry. The cataract surgery registry unit is based at the Clinical Research Centre, MOH, where collected data are analysed and reports generated. The source data producers are Departments of Ophthalmology, both public and private, where cataract surgeries are performed. The users or target groups are individuals or institutions to which the regular registry reports are addressed.

The data standards are established based on the usefulness for cataract surgery registry, ease of data collection and compatibility with other data set (e.g. ICD-10 coding).

Three types of case record forms (CRF) are employed in data collection. The pre-clerking forms gather information on patient demography, aetiology of cataract, pre-operative visual acuity, pre-existing ocular and systemic co-morbidities, first and second eye operation. The operative record forms capture data related to surgical procedure, such as type of cataract surgery, day care or non day care surgery, elective or emergency surgery, type of sedation, type of intraocular lens used, and intra-operative complications. The cataract outcome forms collect data on post-operative complications, post-operative best corrected visual acuity by 12 weeks and possible factors for poor visual outcome of worse than 6/12. The CRFs are used as part of the clinical records. Regardless of age, all patients who undergo cataract or combined cataract surgery are included in the registry. The completed forms are sent to CSRU where data are analysed, interpreted and presented in regular report to be disseminated to the users. Participation of source data producers is entirely voluntary.

The data transferred to CSRU are kept strictly confidential with access only to authorized individual working in the CSRU. Till June 2002, 23 centres have participated in the registry. They are from MOH Ophthalmology departments (21 centres), military hospital (1 centre) and teaching hospital (1 centre).

4. STATISTICAL ANALYSIS

This preliminary report is a descriptive analysis. All data were described in terms of percentages except continuous data, like follow-up period where summary statistics like median, 25th percentile and 75th percentile were calculated, and for age, where median (50th percentile), mean, minimum and maximum value were calculated.

We did not compare cataract surgery outcomes i.e. intra-operative and postoperative complications, and visual outcomes by centres or surgeon status. We also ignored the missing data and confined the analysis to available data. Therefore, no imputation was done.

ABBREVIATIONS

CF	Counting finger
CMO	Cystoid macular oedema
CSRU	Cataract surgery registry unit
ECCE	Extracapsular cataract extraction
HM	Hand movement
IOL	Intraocular lens
ICCE	Intracapsular cataract extraction
INTRA-OP	Intra-operative
LA	Lens aspiration
NPL	No perception of light
PCO	Posterior capsule opacification
PCR	Posterior capsule rapture
PE	Phacoemulsification
PL	Perception of light
POST-OP	Post-operative
2 IOL Imp	Secondary IOL implantation
SDP	Source data producers
VA	Visual acuity
ZD	Zonular dialysis

GLOSSARY

Advisory Committee	A committee, board, council, panel or group thereof that is established by the sponsors of the registry to govern the registry. The Advisory Committee shall direct and control the activities of the designated collaborating unit, which manages the day-to-day operations of the registry.
Advisory Committee member	An individual appointed to serve on an advisory committee. Members may have relevant expertise and/or represent the interest of SDP, users or donor.
Chairperson	An advisory committee member who is appointed to preside at committee meetings and ensure that all rules of order and conduct are maintained during each session.
Disease Register	The ongoing systematic collection, analysis and interpretation of a specific disease data essential to the planning, implementation and evaluation of clinical and public health practice, closely integrated with dissemination of these data to those who need to know. The final link in the chain is the application of these data to the management, prevention and control of the disease. A registration system includes a functional capacity for data collection, analysis and dissemination linked to clinical and public health programs.
Secretary	The individual responsible for an advisory committee's overall administrative management. He/she is ordinarily a staff provided by the designated collaborating unit for the purpose.
Source data producer	The individuals or institutions that report the required data to the registry.
Sponsor	The individuals or institutions that own the registry.