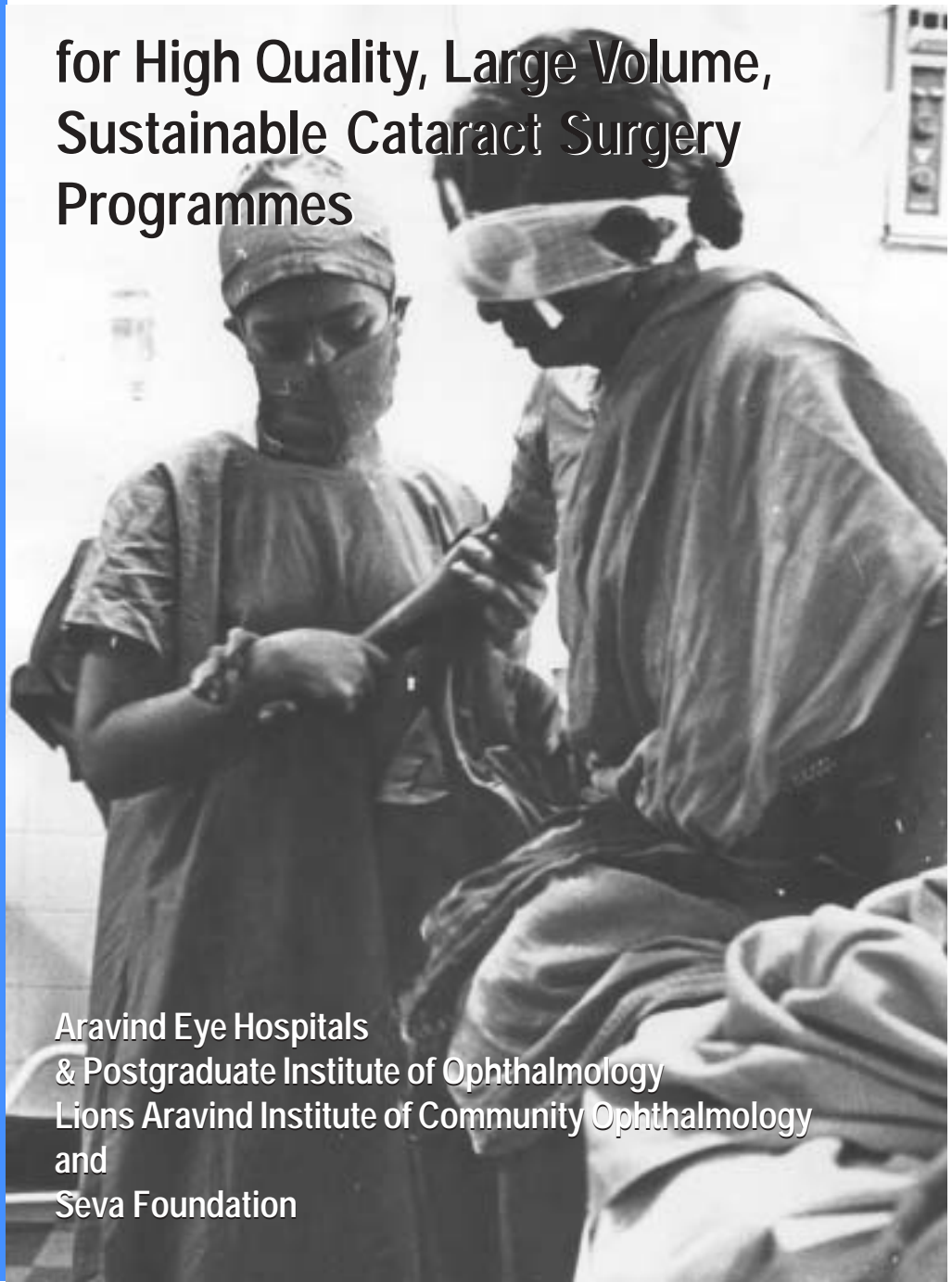




# Paramedical Contributions

for High Quality, Large Volume,  
Sustainable Cataract Surgery  
Programmes



Aravind Eye Hospitals  
& Postgraduate Institute of Ophthalmology  
Lions Aravind Institute of Community Ophthalmology  
and  
Seva Foundation



# Paramedical Contributions

**for High Quality, Large Volume,  
Sustainable Cataract Surgery  
Programmes**

The Quality Cataract Surgery Series is a set of modules explaining principles and techniques for developing high quality, large volume, sustainable cataract surgery programmes, especially in settings where cataract causes much needless blindness. Each module is based on the practices of Aravind Eye Hospitals in South India, with input from other successful programmes.

The set includes the following modules:

- Introduction
- Clinical Strategies
- Paramedical Contributions
- Management Principles and Practices
- Community Outreach Initiatives
- Financial Sustainability
- Architectural Design

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*Mrs. Alikutty Varghese*
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4. Refraction  
*Mr. Muthuramalingam*
5. Patient Counselling  
*Mr. Raheem Rahmathullah and Mrs. P. Kothai*

Special thanks go to Dr. G. Venkataswamy and Dr. G. Natchiar for the perspectives that emerged during critical conversations with them.



# Introduction

**The number of ophthalmic paramedical personnel is increasing by leaps and bounds, and rightfully so, as they are assuming an increasingly important adjunctive role in the delivery of quality eye care.**

**- David L. Schafer**

**Ophthalmic assistants may generate important and preliminary information to be used by the ophthalmologist with whom they work, but ophthalmic assistants do not generate medical or surgical diagnosis or prescriptions to be used by a patient.**

**- Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO)**

## Rationale

In the last three decades, a number of auxiliary professionals such as ophthalmic assistants, opticians, certified orthoptists, research assistants and ultrasonographers have come to be identified as allied health personnel in ophthalmology. Although each of these groups plays a specific meaningful role in the ophthalmic field, it is the ophthalmic assistants (OAs) who carry out or help with certain tasks that are traditionally and uniformly performed by the ophthalmologist.

These tasks involve collecting data and recording measurements on patients, preparing patients for surgery, assisting with surgery, offering postoperative care, and counselling patients. However, these tasks do not involve any judgments or conclusions such as diagnosis, disposition of treatment, or prescription. Ophthalmic assistants do not (and cannot) supplant the physician but rather supplement the ophthalmologist by rendering support services. Their broad areas of work include outpatient and refraction departments, operation theatre, wards and patient counselling.

The ophthalmic assistants in all of these areas make vital contributions to the achievement of high quality and financial viability in large volume cataract surgery programmes.

## Objectives of the Paramedical Module

- To provide eye care programmes/hospitals/practitioners in developing countries with lessons learned regarding the work of trained paramedical ophthalmic assistants and their critical contributions to high quality, large volume, sustainable cataract surgery programmes.
- To describe the valuable role of trained ophthalmic assistants and patient counsellors in outpatient and refraction departments, operating theatres, wards and patient counselling.
- To show ways for existing programmes to increase their volume, quality and sustainability through the development and utilisation of paramedical personnel.

## Examples and Models

The examples in this module are based on the role of trained paramedical staff at Aravind Eye Hospitals.

Please note that the Paramedical Contributions Module is not intended to be a training handbook or a manual on ophthalmic nursing care. Rather its focus is on the critical contributions of trained paramedical personnel in high quality, large volume, sustainable cataract surgery programmes.



**Ophthalmic care, unlike other specialities, does not demand skilled bedside nursing. In our experience, trained paramedical assistants together with a minimum of qualified nurses are sufficient to take care of the preoperative and postoperative requirements of patients.**

**- Dr. G. Natchiar, Joint Director, Aravind Eye Hospitals**

**We do not know how we do it but it has been done. When we need paramedical assistants, we select girls from the villages - simple, honest people brought up in the traditional culture, which includes consideration for family and the community. Their families have provided a certain discipline, love and care in their daily lives... They can be easily trained to care for somebody else. Twice a year we find them and train them intensively. The hospital provides a free midday meal for all of them, as well as clothing. We have made the best use of the people who have come and we have built teams.**

**- Dr. G. Venkataswamy Founder, Aravind Eye Hospitals**

## Definitions

The **ophthalmic assistant (OA)** is a skilled person whose academic and clinical training qualifies him/her to carry out ophthalmic procedures. These are done under the direction or supervision of an ophthalmologist or a physician licensed to practice medicine and surgery and qualified in ophthalmology.

At Aravind, based on their skills and performance, an ophthalmic assistant with at least five years of experience is upgraded to an **ophthalmic technician**.

At Aravind, the term **nurse** usually refers to registered nurses (RNs) fully trained elsewhere in all aspects of nursing care. However, the term is sometimes used at Aravind in traditional operating theatre terminology, as in scrub nurse, running nurse, etc.

In the early years, Aravind faced a persistent shortage of qualified nurses. There were many instances of qualified staff nurses who were trained in ophthalmic nursing at Aravind leaving for other jobs. Thus a lot of time spent in training was a waste. Besides, we found that for ophthalmic care it was possible for a trained ophthalmic assistant to deliver the same quality of care as a qualified nurse. Hence Aravind evolved a policy of recruiting qualified nurses only for specific posts such as nursing supervisor or nursing coordinator. We use the term ophthalmic assistant instead of the term 'nurse' as the latter implies a qualified person in contrast to one who has been trained on the job.

- B. Radha Bai, Nursing Supervisor, Aravind Eye Hospital

## Ophthalmic Paramedical Training

Recognising the importance of ophthalmic paramedical staff in eye care service delivery, Aravind established its in-house training programme to meet its own need for trained paramedical staff.

Twice a year, two batches of 17 to 19 year old candidates (35-40 students in each) who have cleared their high school examinations (Grade 10) are selected based on the eligibility criteria deemed appropriate by the institution.

### Structure of the ophthalmic assistants' training programme at Aravind

Basic training	: Four months (observation and classroom learning)
Specialisation training	: Eight months (demonstration and practice)
Probationary on the job training	: One year (under constant supervision)

The basic training portion includes studies and practice in

- Basic general anatomy and physiology
- Ocular anatomy, eye diseases and emergency management
- Skills such as
  - Visual acuity testing
  - Tonometry
  - Lacrimal duct patency
  - Blood pressure measurement
  - Bed making
  - Human relations, communication skills and compassion

**Shortage of trained nurses together with their high turnover due to other job prospects in the government sector were important factors that spurred the idea of training people in ophthalmic assistance on the job. It is too expensive to hire RNs and then have to train them in ophthalmic assistance.**

**- Dr. Usha Kim,  
Programme Director,  
Paramedical Staff  
Training, Aravind Eye  
Hospitals**

On completing the four-month basic training, students take one of the specialisation courses:

- Outpatient care (OPD)
- Operation theatre assistance
- Inpatient care (Wards)
- Refraction
- Aurolab (Aravind's IOL, pharmaceutical and suture manufacturing unit)

The next eight months are spent training in the speciality with lectures in the morning and practical work in the afternoon. For the last 12 months, candidates work under close supervision.

Aravind's large volume of patients has necessitated the need for ophthalmic assistants to choose an area of specialisation. However, in lesser volume settings, it is possible for ophthalmic assistants to be cross-trained in ophthalmic specialities to enable them make switchovers when necessary.

In response to the need for trained personnel, Aravind has extended its training programmes, which are now available to all candidates meeting the eligibility criteria. The new offerings include:

- 1. Diploma in ophthalmic assistance:** This two-year course, offered in collaboration with Mother Teresa Women's University, Kodaikanal, India, imparts training in ophthalmic clinical assistance through classroom sessions and hands-on practice.
- 2. Postgraduate diploma in ophthalmic clinical assistance:** This two-year course provides training in operation theatre preparation, surgical assistance and postoperative patient care, outpatient procedures and ward management, with internship in an eye hospital.
- 3. Postgraduate diploma in optometry:** This two-year course offers training in aspects of optometry such as refraction, field evaluation, and contact lens fitting, with internship in an eye hospital.

**Administrative structure of the paramedical staff training programme at Aravind:**

- **Administrator:** Qualified ophthalmologist who co-ordinates academic activities and postings, and fills in for staff when the need arises.
- **Academic Co-ordinator:** Qualified nurse who is in charge of scheduling classes and organising continuing medical education (CME) programmes for paramedical staff.
- **Supervisors (4):** Experienced ophthalmic technicians or nurses in charge of wards, operation theatre, outpatient and refraction departments.

## The Aravind model of paramedical staffing

The role of trained paramedical staff in facilitating high quality, large volume, sustainable cataract surgery is central to Aravind's successful large volume cataract services. The principle of division of labour helps to maximise the skills of the ophthalmologist by developing a team approach with auxiliary personnel. Efficient eye care service delivery depends on optimum utilisation of all categories of resources – human resources, equipment, instruments, beds and finances.

At Aravind, the concept of human resource development evolved in response to increasing need for ophthalmic assistants and to provide adequate

**Ophthalmic assistance is skill-oriented and repetitive in nature. It does not involve decision making, interpretations and interventions.**

**- Dr. Usha Kim**

clinical experience to develop the professional competence of these ophthalmic assistants.

Human resource development is one of the important components of large volume cataract surgery. The history of Aravind's paramedical training can be traced back to 1970-72, when its founder, Dr. G. Venkataswamy, was Professor and Head, Department of Ophthalmology, Madurai Medical College.

When I was teaching at Madurai Medical College in the late 1960s, I received a grant from the US Government to train ophthalmic assistants. Around this time, opticians were being trained only in refraction at the Madras Ophthalmic Hospital. Considering the enormous backlog of cataract blindness in the country, paramedical staff trained in managing outpatients, assisting the ophthalmologist in the operation theatre, and - in the context of a developing nation - screening patients in eye camps, would serve to relieve the ophthalmologist of such repetitive tasks as are delegable. Under India's National Programme for Control of Blindness, trained paramedical ophthalmic assistants are employed as primary eye care workers, who serve as the first point of contact with the public in identifying eye disorders. We need many more trained ophthalmic assistants to complement ophthalmologists in eye care programmes in the voluntary sector to effectively tackle the backlog of cataract blindness. The ophthalmic assistants' training initiated earlier was strengthened and consolidated to meet the need for such personnel. when Aravind Eye Hospital was established.

**- Dr. G. Venkataswamy**

**Paramedical staff at Aravind are put through rigorous on the job training to perform regular clinical tasks and specialised ones like measuring visual acuity or assisting in the operation theatre. The concept of 'smarter working' by delegating daily work to paramedical staff significantly increases the volume of work done by ophthalmologists.**

**- R.D. Thulasiraj,  
Executive Director,  
Lions Aravind Institute  
of Community Ophthalmology- Aravind Eye  
Hospitals**

Trained and skilled clinical human resources are critical and therefore must be utilised optimally. Typically, an ophthalmologist's repertoire of work involves administrative tasks, skilled but repetitive tasks, and judgement-based tasks. An ophthalmologist's unique competence lies in judgement-based tasks such as interpreting investigative findings and decision-making tasks such as delineating the line of treatment or surgery. Administrative and repetitive tasks can often be done (and better too) by a non-ophthalmologist who has been adequately trained. However, very often, ophthalmologists find themselves in situations where repetitive skill-based tasks compromise their judgement-based time.

In large volume cataract surgery programmes, efficient and knowledgeable ophthalmic assistants play a vital supportive role in several areas of ophthalmic care.



# Paramedical Staff in the Outpatient and Refraction Departments

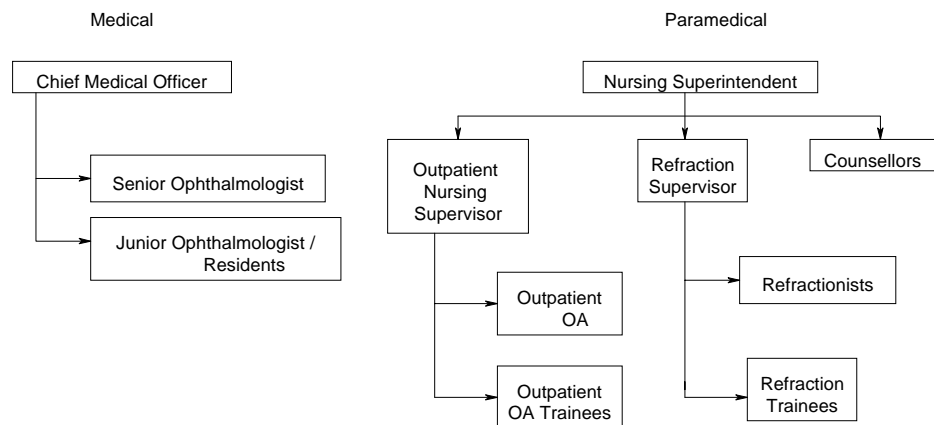
**It is within the outpatient department that the clinical ophthalmologist, besides making a clinical diagnosis, also makes other decisions regarding investigation, treatment and surgery that will influence the future line of treatment of the patient, whether admitted to the ward or treated as an outpatient. Hence it is necessary that the ophthalmic assistant be aware of the decision-making process in the outpatient department.**

**- F. Rooke/P. Rothwell/ D. Woodhouse, in Ophthalmic Nursing: Its Practice and Management, 1980**

## Introduction

Almost every patient who visits an eye care facility will go through the outpatient and refraction departments, making these very busy places to work in. Ophthalmic assistants in these departments are largely responsible for their organisation and its successful functioning. These ophthalmic assistants must ensure smooth patient flow and, all the while carrying out preoperative and follow-up tests and refractions.

## Organisation of the outpatient and refraction departments



## Skills of ophthalmic assistants in the outpatient and refraction departments

1. Organisational skills and ability to delegate and assign work, to control queues and groups, to plan and report.
2. Clinical knowledge wide enough to understand the decision-making process of the department and to respond to patients' queries.
3. Nursing skills required to provide outpatient treatment and to use the equipment for testing and investigations.
4. Simple technical knowledge, especially in optics and electricity, in order to understand the purpose and use of ophthalmic equipment and its maintenance.
5. Knowledge of community ophthalmology and sociology sufficient to understand the interaction of the outpatient department with the rest of the hospital and with the community.

- Adapted from Ophthalmic Nursing: Its Practice and Management

**Patient screening is best performed by an experienced medical assistant or technician. This function is to provide all of the necessary ophthalmologic tests. This in turn reduces the ophthalmologist's time with the patient, freeing him/her to analyse data, make the diagnosis, confirm observations and institute the treatment and procedures that are required.**

**- David L. Schafer**

Assessment of patients is a fundamental skill that all nurses need to acquire in order to deliver efficient patient care. In the ophthalmic setting, the short length of inpatient stay, the increasing use of day care facilities and the short contact time available between nurse and patient in the outpatient department result in limited time in which to assess the needs of patients. It is particularly pertinent for nurses working with patients admitted for surgery that the change in delivery care has resulted in change of practice. No longer do these nurses have the luxury of time preoperatively when a relationship between nurse and patient can gradually develop and the needs of the patient be ascertained as the rapport develops over time. Ophthalmic nurses must adjust themselves from longer involvement with patients and be aware of the variety of talents and abilities involved in the assessment process, which must be applied succinctly in the allotted time.

The many skills needed to execute an effective assessment include verbal and non-verbal communication, listening, use of silence, pitch and tone of voice, touch, positioning and observation. These skills must be learnt and practised before assessment can truly be effective. This will help to ensure that the skills employed are those that are most appropriate and used in the most appropriate manner to enable ophthalmic nurses to continue to assess their patients effectively, in order that care can be planned and delivered to the highest standards.

- Ophthalmic Nursing, Issue 1, Volume 1, May 1997, p. 26-29

## Duties of ophthalmic assistants in the outpatient and refraction departments

Ophthalmic assistants in these departments are responsible for preoperative tests and follow-up refraction, and must be ready to assist with ocular emergencies. In a large volume clinic, ophthalmic assistants might be assigned to one specific test or procedure, in rotation after several weeks or months. In smaller clinics, OAs can play multiple roles, according to the need.

### Preoperative tests

#### Visual acuity

Assessment of visual acuity is the simplest means of evaluating a patient's visual status. It is a subjective assessment because of its dependence on the patient's reported ability/inability to see objects. After registration, it is essential that the patient's visual acuity be checked and recorded before proceeding with any other test. A single trained ophthalmic assistant can record the visual acuity of 12-15 patients in an hour.



At Aravind, the former practice of testing visual acuity by asking patients to close their eyes alternately using their hands was inaccurate and unreliable. This led to the use of occluders to test visual acuity, resulting in a more reliable and accurate measurement.

Depending on the patient's needs, different types of charts can be used for assessing visual acuity, such as the Snellen's chart with its combination of letters and numbers, E-chart, Landolt rings, Allen's picture cards and single 20/200 E.

At Aravind, for example, visual acuity of literate patients is assessed using charts with English or Tamil (the local language) and numerals. The E and C charts are used for illiterate patients. These charts are mounted on the walls in rooms with a length of 6 meters. The visual acuity is checked in both eyes with and without spectacles as applicable.

If the patient is unable to read even the 6/60 line, finger counting is done. If the patient finds this difficult, palm movement in front of the eye is tried. If the patient is unable to recognise even hand movement, then a torch light is used to check whether light perception is present or not. Findings are recorded in the case sheet and the patient is then sent for refraction, or other tests.

In Aravind's busy outpatient departments, patients experience less waiting time because the ophthalmic assistants can break them into three streams after visual acuity testing according to the patients' requirements.

1. Refraction
2. Preliminary examination by junior ophthalmologist
3. Laboratory, if necessary

After a junior ophthalmologist examines patients using torchlight and elicits their history, patients move on to the following tests, all performed by ophthalmic assistants.

- Intraocular pressure (Schiotz tonometry)
- Lacrimal duct patency
- Blood pressure recording
- Keratometry and A-scan
- Refracton

### Tonometry

Aravind's practice is to test only individuals above 40 years because of the increased incidence of glaucoma in this age group. If the tension is high, such patients are identified by a special colour (red) on their case sheets and referred to the glaucoma clinic. At Aravind, a trained ophthalmic assistant can perform tonometry on 10 patients in an hour.

### Lacrimal duct patency

This test is mandatory for all cataract patients because of the high rate of lacrimal sac infection associated with cataract. This is an important test that underscores the responsibility of a well-trained ophthalmic assistant.

### Blood pressure recording

This test is mandatory for all patients undergoing surgery. The patient is posted for surgery if the blood pressure is less than 150/100. Hypertension is indicated by a special sticker on the patient's chart.

### Keratometry and A-scan

The keratometer is an instrument that measures the corneal power of the eye. The A-scan instrument measures the axial length of the eye using ultrasonically guided echo waves. Both are used to calculate IOL power for IOL implants. At Aravind, the ophthalmic assistant records the readings of both eyes for comparison checks, to rule out abnormalities that might appear like in high myopia or hypermetropia.

**Until 1990, all cataract patients had their eyes dilated and then re-fracted. However, this practice has been replaced by a policy to dilate only specific cases suggested by the ophthalmologist. This saves on staff (thus making it possible for them to be utilised in other areas) and precious time. Patients are satisfied because of the reduced waiting time.**

**- B. Radha Bai, Nursing Superintendent, Aravind Eye Hospitals**

**Formerly, we used dilation drops that took half an hour to have the desired effect. Since 1997, these have been replaced by a more powerful mydriatic that dilates the pupil in about eight to ten minutes. This mydriatic is now being manufactured in-house in the ophthalmic pharmaceutical division of Aurolab. These changes have been found to save time and contain costs.**

**- Mr. Muthuramalingam,  
Senior Refractionist,  
Aravind Eye Hospitals**

A single ophthalmic assistant well trained in keratometer and A-scan is sufficient for a normal load of 100 patients a day, especially if the flow of patients is streamlined during nine hours of working time. Two ophthalmic assistants working with a single set of instruments can scan around 200 patients every day. It usually takes about two to three minutes each for keratometry and A-scan for every patient.

Cleaning and sterilising this equipment is an important job of this ophthalmic assistant.



## Refraction

From the patient's perspective, the period of postoperative care normally spans the interval from the conclusion of surgery until the goal of surgery is achieved by provision of stable improved vision. In the absence of complications, this usually occurs two to three months after the surgery and coincides with the prescription of final refractive correction. At Aravind, the daily refraction load is 250-400 patients and requires 17-25 well-experienced refractionists working nine hours every day.

Over a period of two decades several changes in refraction practices have taken place at Aravind. These improvements have resulted from a combination of trial and error, fortuitous discoveries and a deep desire to constantly update practices, thereby weeding out the redundant. In a large volume setting, these practices have been found to save considerable time and resources, and to improve the quality of services.

For example, all cataract patients used to go through scanning resulting in long queues in the A-scan room. The current practice is to scan only those cataract patients who are admitted for surgery.

Also at Aravind, all speciality clinics are upstairs and have their own separate refraction units, with three refraction cubicles per speciality clinic. This alleviates congestion in the ground floor refraction department.

Currently at Aravind, the use of a streak retinoscope rather than the plane mirror retinoscope has resulted in quicker testing time, greater accuracy and higher quality of results. An ingenious design that allows the refractionist's table to be placed at the side allows greater ease of movement while examining patients.

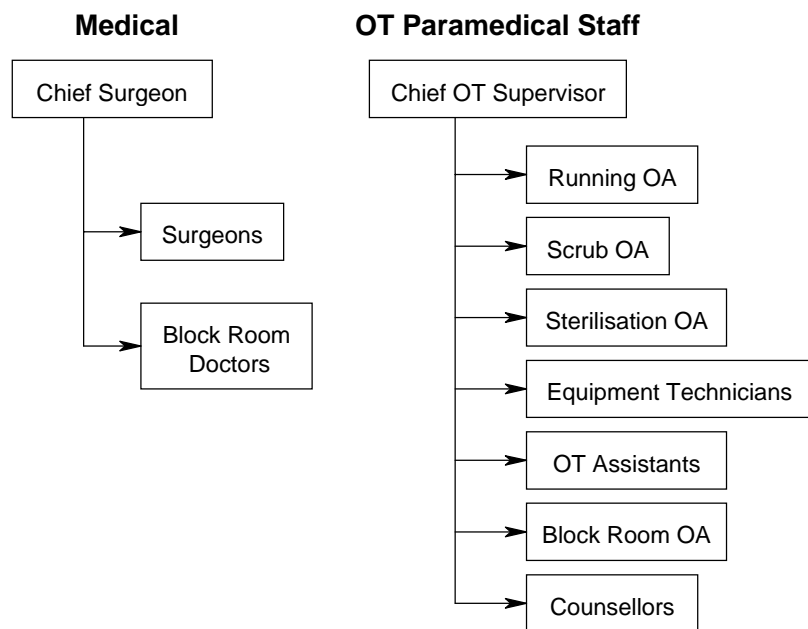
# Paramedical Staff in the Operation Theatre

## Introduction

The responsibility of creating a “surgery-friendly” environment that enables an ophthalmological surgeon to function at his/her optimum rests with the operation theatre personnel. Successful high quality, large volume cataract surgery is possible only with a cohesive team whose members have a strong sense of commitment and dedication, as well as specialised skills.

This section highlights the skills and duties of trained paramedical staff in the operation theatre that increase the ophthalmologist’s volume of work.

## Organisation of the operation theatre



**The fundamental principles in the operation theatre administration are asepsis, professionalism and the concept of a surgical team. An integrated team of doctors and trained ophthalmic assistants run the operation theatre. The doctors are the captains of this team, but when one part of the team does not function at its best, the output is affected.**

**- A. Varghese, Operation Theatre Supervisor, Aravind Eye Hospitals**

## Skills of ophthalmic assistants in the operation theatre

1. Ability to care for and maintain ophthalmic instruments, which are delicate and easily damaged.
2. Knowledge of asepsis and scrubbing/gowning/gloving technique.
3. Knowledge of names of instruments and ability to set up the trolley for different types of surgery.
4. Ability to anticipate intraoperative complications.
5. Knowledge of blocking techniques and management of complications during blocking.
6. Teamwork skills.



## Duties of ophthalmic assistants in the operation theatre

### Operation theatre supervisor (Coordinator)

The OT supervisor is responsible for overall administration of the operation theatre and for the supervision of its nursing services. Responsibilities include:

- Motivating and promoting quality consciousness amongst operation theatre staff
- Planning and scheduling the day's activities for surgeons and OAs
- Assigning surgeons and paramedical staff to specific theatres
- Decision-making for smooth coordination of activities
- Effective communication with peers, and reporting to authorities
- Analysis and evaluation of nursing services in the operation theatre
- Evaluating performance of the operation theatre personnel
- Assisting surgeons in the operation theatre by providing adequately prepared team members
- Arranging continuing medical education (CME) programmes for OT ophthalmic assistants
- Coordinating duties with other departments to ensure smooth functioning of the department
- Periodical maintenance of linen, instruments and equipment
- Checking safety arrangements such as
  - cardio pulmonary resuscitation (CPR) supplies and their location
  - fire safety precautions
- Checking quality assurance by
  - taking microbial swabs for culture
  - recording surgical statistics
  - analysing and reporting incidence and complications in the monthly infection control meetings
- Developing systems and procedures that enhance maximum utilisation of resources.

Theatre work is demanding. The person in charge is not only responsible for the immediate problems of supporting anaesthetic and operative work but also continued maintenance of equipment, regular supply of materials and recycled packs (gowns, towels, etc.) and the disposal of waste or infected material. In addition to being responsible for ensuring that the operation theatre complex is in optimum working condition, his/her responsibilities include staff welfare, training and maintenance of discipline.

- Adapted from Ophthalmic Nursing: Its Practice and Management

### Running (Circulating) ophthalmic assistant

The running nurse ensures that all nonsurgical aspects of the operation theatre function smoothly. His/her responsibilities include:

- Assisting the operating team by providing sterile sets of instruments for every case, additional equipment and materials
- Making external adjustments of microscope, cautery, vitrectomy and other machines
- Rechecking blocks

**Ophthalmic assistants trained in operation theatre techniques and surgical assistance do better than qualified nurses who do not have a background and speciality training in ophthalmic procedures.**

**- B. Radha Bai**

**A skilled running nurse needs to think critically and make decisions while working. Besides, he/she also needs to be proactive, that is, able to anticipate emergencies and make necessary arrangements, such as quick supply of instruments in such situations. That's why a running nurse's job is interesting and exciting.**

**- A. Varghese**

- Reassuring patients and answering their questions
- Regulating patient flow from wards
- Positioning the patients onto the table and helping them off the table
- Providing details from the case sheet, writing postoperative notes
- Maintaining records for the OT regarding details of surgeries
- Recording incidence of intraoperative infections
- Acting as the messenger from the OT
- Ensuring that instruments are in optimum working condition
- Sending equipment and instruments for repair
- Ensuring that regular cultures are taken from all areas of the operation theatre, including cultures from the hands of the operation theatre staff
- Helping in sterile preparation of the surgical team
- Maintaining the autoclave and distilling machine, by ensuring that they are serviced at least every six months
- Maintaining adequate supplies, and keeping an account of the intraocular lens and sutures used
- Sending torn linen to be mended
- Regularly checking expiry dates of items and drugs and replacing them immediately.

### Scrub ophthalmic assistant

The scrub nurse, trained in ophthalmic surgical assistance, directly assists the surgeon during surgery. The most important aspect of a scrub nurse's job is his/her ability to anticipate the next step in the surgical procedure. The scrub nurse's responsibilities include:

- Having a clear understanding of the surgical procedure underway
- Maintaining sterile conditions throughout the surgery
- Carrying out procedures such as draping, setting the operating microscope, and placing the lid speculum and bridle sutures
- Assisting the surgeon during surgery by providing appropriate instruments and material, helping in the use of instruments, maintaining a dry field to prevent accumulation of fluid, anticipating and identifying complications in a timely manner, and providing the required instruments for their management
- Ensuring that the surgical tray is correctly arranged and the surgeon's requirements are met
- Tracking the number of sharps and their location (The same number of sharps needed for surgery must be on the trolley after surgery is complete.)
- Keeping a repository for disposable sharps to protect theatre staff when handling refuse
- Ensuring maximum utilisation of resources

### Sterilisation ophthalmic assistant

A large volume cataract surgery programme will need someone who can provide continuous sterilisation services. The responsibilities of the sterilisation nurses include:

- Handing sterile instruments to the scrub nurse

- Sterilising instruments between surgeries and checking them for faults
- Carrying out gross cleaning and sterilising of instruments at the end of the surgical day

### Equipment technician

Operation theatres that function at a large volume rate use a lot of different equipment, electrical and otherwise. These require a full-time qualified technician to tackle problems as they arise.

### Theatre Assistant/Runner/Orderly

- Cleaning the operation theatre and fixtures
- Shifting equipment
- Carrying out minor electrical and mechanical manipulations
- Moving patients in and out of the theatre

### Block room ophthalmic assistant

In a large volume cataract surgery programme, assigning paramedical staff specifically to the block room will help streamline the flow of patients. Block room nurses are responsible for:

- Identifying the patient by verifying the name on the patient's chart
- Identifying to physician all special cases: known cardiac, hypertension, diabetic patients
- Checking the patient's case sheet before surgery to ensure that all required tests have been done and prescribed premedications have been given
- Verifying that the type of surgical procedure to be performed and the eye to be operated on correspond with the specifications on the patient's chart and the operation theatre list
- Ensuring that the patient, or the guardian in the case of children, has signed the consent form
- Ascertaining whether the patient has allergies
- Ensuring that the block room is ready for patient preparation by making beds and arranging medicine trays
- Checking whether the block is effective by looking for ocular movement and blinking of eyes
- Checking pupil dilation
- Administering blocks and assisting doctors with blocks



## Operation theatre staffing pattern

There is considerable overlap regarding the responsibilities of OT personnel. Hence a convenient combination can be determined according to the patient volume. The following pattern of staffing is suggested for effective functioning of a cataract surgery programme performing 100 surgeries per day, in 2 operation theatres.

Operation theatre coordinator	:	1 for 2 theatres
Capacity	:	2 tables per theatre
No. of surgeons	:	1 per theatre
No. of scrub OAs	:	2 per surgeon
No. of running OAs	:	2 (1 per theatre)
No. of sterilisation OAs	:	1 for 2 theatres
No. of theatre assistants	:	1 for 2 theatres
No. of block room nurses	:	1 for 2 theatres
Anaesthetist on call	:	1 for 2 theatres



# Paramedical Staff in the Wards

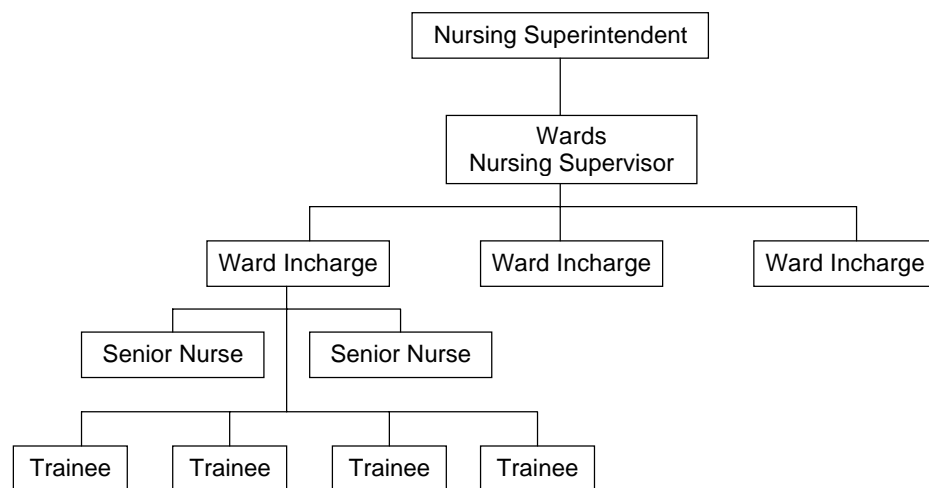
**Developing countries have been confronted with the problem of quantity versus quality. With lack of certified ophthalmologists, ophthalmic medical assistants gain much greater responsibility and practical experience in treating patients.**

**- Adapted from Ophthalmic Technology: A Guide for the Eye Care Assistant**

## Introduction

Preoperative and postoperative care is a critical component of nursing for it determines the patient's state of mind before surgery and attitude towards the hospital. Ophthalmic assistants in the wards are responsible for ensuring continuity of ophthalmic care before and after surgery, and for providing physical and psychological support to patients during their stay. This section on preoperative preparation and postoperative care outlines the responsibilities of ward OAs nurses from the time patients are admitted until they are discharged.

## Organisation of Wards



## Skills of ophthalmic assistants in the wards

Ophthalmic nursing in the wards demands not only compassionate and thoughtful care for patients, but also accuracy of judgement and manual dexterity when treating the eye because it can easily get damaged. Ward nurses also require:

1. Communications skills
2. Safe medication knowledge
3. Understanding of aseptic technique
4. Skill in bed making
5. Understanding of how to care for the visually disabled
6. Pre and postoperative counselling skills
7. Experience in preoperative preparation (medication dispensing, eye lash preparation, liaison with physician in case of systemic disorders)

**At Aravind, ophthalmic assistants are trained to identify postoperative complications and inform the ophthalmologist concerned. This practice ensures quality and saves considerable time in a large volume setting.**

**- Tahirisha Begum,  
Ward Supervisor,  
Aravind Eye Hospitals**

8. Experience in postoperative care (medication dispensing, application of dressings, examination for postoperative complications)
9. Ability to identify postoperative complications early and notify to the attending doctor
10. Ability to identify general emergencies and handle crisis

## **Duties of ophthalmic assistants in the wards**

- Ensuring that the physical, mental and medical requirements of patients admitted for surgery are met
- Entering the patient's name, medical record number, time of admission, receipt number and other relevant details in the admission and discharge slip
- Giving a room orientation to patients
- Providing preoperative and discharge instructions to patients
- Rechecking preliminary investigations before surgery
- Administering medications conscientiously
- Accompanying patients for their checkup by the ward physicians
- Assisting ward ophthalmologists in keratometry and A-scan examination before surgery
- Preparing patients for surgery and escorting them to the operation theatre
- Assisting ward ophthalmologists in slit lamp examination of patients the day after surgery
- Identifying postoperative complications
- Addressing queries and complaints
- Changing linens and keeping rooms after discharge
- Dealing with ocular and general emergencies

# Contributions of Paramedical Staff

The contributions of ophthalmic assistants to high quality, large volume, sustainable cataract surgery programmes are very valuable. Trained paramedical staff are central to the success of the Aravind model and other programmes. Efficient eye care service depends on optimum utilisation of all staff resources, especially OAs.

## Paramedical contributions to high quality

1. The number and distribution of staff at Aravind is such that each person has a definite role to play in the whole process of a patient undergoing cataract surgery, from the initial tests to final discharge counselling. Well-defined roles and responsibilities facilitate quality work, even when the whole process is repeated numerous times each day in an assembly line fashion. Tasks to match skills is important. The right mix of experienced OAs (who do technical tasks and supervise other staff) and trainees (who help patients) ensures high quality in all areas.
2. Several steps taken on a regular basis help ensure that the work of paramedical staff is of high quality.
  - Senior ophthalmic assistants are responsible for training junior OAs.
  - Needs-based Continuing Medical Education (CME) is conducted twice a year for ophthalmic assistants.
  - OAs are encouraged to attend workshops and conferences.
  - OAs take advantage of training offered by volunteer consultants.
  - OAs participate in infection control meetings and quality assurance teams.
  - Patient satisfaction surveys are conducted and analysed, and suggestions implemented when possible.
  - Paramedical staff take part in screening camp meetings so that patient flow can be predicted and adequately staffed.
3. Systems and procedures must be “intelligent” and evolving. Some paramedical procedures have been adapted over the years to improve the quality of patient care.
  - Initially, all preoperative patients from one ward were taken to the area outside the operation theatre to await their surgery. This caused numerous problems (increased wait time and decreased patient satisfaction, minor surgery patients waiting for a long time, patients with systemic problems suffering diabetic shock or cardiac stress). A new scheduling process now “batches” patients according to
    - anticipated surgeon throughput (sending only enough patients for each hour of surgery)
    - type of surgery (cataract separated from other cases)
    - simple cataract cases first, and more difficult cases later in the morning

**The most important aspect of high quality, large volume surgery is creating a system of procedures that work in an uninterrupted manner, much like a conveyor belt. It is this support system that enables a surgeon at Aravind to perform large volume surgery. The same surgeon might not be as productive in a situation that did not provide this kind of support.**

**- Dr. G. Natchiar**

- septic cases and systemic cases separately to ensure better supervision
  - Patients used to sit for their blocks. This caused several potentially serious medical problems (fainting, sudden shock, vasovagal attack, sudden drop in BP), leading to patient dissatisfaction, more stress for staff and patient attenders, less efficient use of staff time, and delays in surgery. The simple move to blocking patients in a lying down position has improved the quality of the blocking procedure.
4. Intraoperative complications by surgeon and by ophthalmic assistant are registered each day by a senior OA. Monthly meetings are held to discuss problems and improvement.
  5. Even in a large volume setting, quality always comes first. OAs are trained to do blood investigations requested by physicians and to take smear and culture in all cases of
    - one eyed patient
    - blepharitis
    - partial block in lacrimal duct
    - dry infection
    - chronic redness

### Paramedical contributions to large volume

The staff strength, its composition, working hours and job allocation determine the volume of work done. Larger volumes can be achieved with larger numbers of staff in the right composition working on clearly specified jobs. In diagnosing or treating a patient, there are a number of clinical tasks. Some of these are routine and repetitive by nature while others are complex and require fine clinical judgement. In many settings, an ophthalmologist does an entire range of clinical tasks including those that are routine and time consuming. With proper training, paramedical staff can perform many of these routine tasks regardless of how specialised they are. They can be taught to perform a range of activities from the simple task of measuring visual acuity to the use of A-scan or computerised field analysis. Building this concept of “smarter working” by allocating routine work to the paramedical staff can significantly increase the volume of work an ophthalmologist can do.

- R. D. Thulasiraj, R. Priya, S. Saravanan in Large Volume, High Quality, Low Cost Cataract Surgery

1. Almost all patient care tasks are performed by paramedical staff, leaving doctors to do only history-taking, specialised tests, diagnosis, and surgery.
2. While checking visual acuity, a trained ophthalmic assistant, who is the first point of contact for the patient, is able to ascertain whether the amount of visual loss is directly proportional to the amount of cataract, particularly in instances of immature cataract. In a large volume setting, such training has been found to save time by alerting the ophthalmologist to other possible associated pathology.

**Some senior ophthalmic assistants who work in our free hospital and in screening camps have been trained to take the patient history, especially for doctors who don't speak the local languages. During busy times, they are to determine basic investigations to order so that the doctor's final exam is quick and patients aren't kept waiting.**

**- Alees Mary Rajkumar, Nurses Training Coordinator, Aravind Eye Hospitals**



3. Aravind's success is attributed partly to the paramedical team's rigorous scheduling and planning, which is vital in a large volume setting. For example, in southern India, the month of May records the largest patient turnover, so Aravind gears up for meeting the increase in patient load with stringent planning and scheduling of paramedical staff duties, chalked out a month in advance.
4. Another scheduling feature of a successful large volume setting is efficient work hours. At Aravind, surgery begins at 7 am. Since a single surgeon can perform up to eight surgeries in one hour with adequate and appropriate paramedical staff and equipment (2 scrub OAs and 2 tables), it is possible for two surgeons to complete 80 surgeries in five hours and close the operation theatre at noon. Their afternoon can then be spent in the outpatient department.
5. At Aravind, a single ophthalmic assistant in the outpatient department handles 100-140 patients every day. An "intelligent" adaptation to allow for greater efficiency was to move the A-scan closer to the wards. The A-scan test is now done only on admitted patients, to increase the volume of patients able to be seen in the outpatient department.
6. An aspect of postoperative care at Aravind that has an impact on large volume cataract surgery is the standardisation of postoperative medications - antibiotics, steroids and topical medications. Since 80 percent of cataract patients have no systemic complications, this standardisation expedites postoperative care, and allows OAs in the wards to care for a higher ratio of patients.

### **Paramedical contributions to sustainability**

1. Maintaining strict discipline amongst the paramedical staff in terms of punctuality, reliability, conscientiousness and compassion will ensure smoothly running departments that lead to high patient satisfaction.
2. Identifying senior ophthalmic assistants (over seven years of experience) as ophthalmic technicians not only helps retain excellent staff, but relieves the doctors of some of the less serious decisions regarding testing in the outpatient wards.
3. Because paramedical staff are less expensive professional labour than ophthalmologists, maintaining the optimum ophthalmologist to paramedical ratio (the ideal is 1:5) helps keep the hospital financially viable. Furthermore, using on-the-job paramedical trainees provides well supervised yet low cost employees who are striving to pass their probation and become confident and competent ophthalmic assistants. This contributes to the hospital's image building.
4. As in any successful venture, team building is vital at every step. Aravind strives to create a teamwork approach between medical, paramedical and administrative staff in every department.

# Patient Counsellors

## Introduction and rationale

Medical staff in eye care facilities in developing countries need to spend their time in the delivery of eye care services effectively and efficiently. Since this is the most important aspect of their work, they require maximum time and freedom to fulfill this responsibility. But when cataract patients come for surgery, they are entering a totally new environment. Most of them have poor vision and hence are at a disadvantage. They can be reassured by clear explanation of what they may expect. The time given to patients by medical staff encourages patient confidence. Yet, quite often, patients need more time than doctors or nurses can actually give to them, and this can cause difficulties for the patient and between the patient and the doctor or nurse.

Furthermore, the purpose of hospitals and other health care facilities is to look after patients. In order to build a good reputation, these facilities must provide not only high quality in patient care but also high quality in personalised patient service. This service must satisfy the patients. A good reputation will be established if people in the community talk about the fine services provided to them. Hospital staff are concerned with patient care and treatment. Who, then, is concerned with and involved in the delivery of patient service?

The role of patient counsellors was designed to enable nonclinically trained personnel (volunteers, in some settings) to work with the patients in cooperation with the paramedical staff and the doctors. The patient counsellor position was created to:

- Focus on the importance of making the patients feel welcome and well cared for through increased personal contact
- Assist in the preoperative and postoperative stages of recovery by establishing caring and supportive relationships with patients
- Increase patient awareness and understanding of eye care and general hygiene through group education
- Motivate patients to seek out others from their villages and encourage them to receive eye care
- Alleviate patient fears and uncertainties

## Responsibilities of patient counsellors

### A. To individual patients

- Receive patients on admission
- Help patients decide about surgery in the outpatient department
- Check whether all preoperative tests have been completed
- Take patients to their allotted rooms and make sure they are comfortable



**The principle of seva, or selfless service to our fellow humans, is the foundation of Aravind's free hospital in its mission to prevent unnecessary blindness. The service that Aravind performs takes into account the other important needs (along with vision) of the patients. Through more instructive and frequent contacts with patient counsellors, more patient' needs are met, increasing their chances of becoming successful patient motivators.**

**- Raheem Rahmathullah,  
Aravind Eye Hospitals**

- Create awareness among patients about preoperative procedures
- Inform patients about the time of surgery
- Arrange special diets, if necessary
- Advise patients on postoperative care and the follow-up schedule
- Refer to a nurse, if necessary

### B. To groups of patients

- Information and explanation about cataract and other common eye diseases
- Do's and don'ts during postoperative care
- Information about routine dressings and their timings
- Discharge and follow-up instructions

### C. To the patient counselling coordinators

Patient counsellors meet with their coordinator (someone with a graduate degree in social work plus past experience) on a weekly basis to discuss their work. The coordinator is responsible for the supervision of the PCs, their training and development, and their performance appraisal.

Patient counsellors are paid the same salary as nursing staff, maintaining the same seniority level so that this function is viewed as having the same importance and responsibility as clinical activities.

**[P]atient counsellors... need not be highly qualified, but need to have good communication skills, and a background that contributes to their understanding of elderly people from rural as well as urban areas.**

**- Raheem Rahmathullah**

## Training requirements for patient counsellors

### Patient counsellors need to be trained in the following:

- Basic eye care and general hygiene
- Human relations skills (compassion, communication skills, decision making, positive attitude, cross-cultural understanding)
- Rules and regulations of the hospital/institution
- Preoperative, postoperative and discharge instructions
- Educational methods and motivational strategies
- Assessment of patient needs and general care
- Special diets, if required

Training patient counsellors will improve their social work skills in order to increase the numbers of patients being well served. Training will help the patient counsellors

- Improve their education and service to patients, hence patient satisfaction
- Persuade more camp patients to undergo surgery
- Increase the reputation of the eye care facility as a provider of high quality eye care
- Remain self motivated, creating a greater sense of job satisfaction in this highly demanding position.

All training sessions for patient counsellors must be based on crucial ground rules: confidentiality, full participation, respect for each other, acceptance of each other's feelings and comments, listening with an open heart, safety to speak freely, and punctuality.

## Departmental duties of patient counsellors

At Aravind Eye Hospital's free section, there are approximately 15 patient counsellors in four different postings:

- in the outpatient department, for both new cases and review cases
- two or three on each ward/floor
- in the operating theatre, especially on busy days after camps
- at screening camps

### In the outpatient department

- Counselling/reassuring/convincing reticent patients in the outpatient department and day care surgery patients
- Helping nurses to arrange smooth patient flow
- Counselling review patients



After the final investigation in the outpatient department at Aravind, doctors send their patients to the counselling section with their case sheets outlining the details of their condition or disease and the surgery or treatment advised.

- Advise ECCE with IOL in LEFT EYE

The counsellor's job in the OPD is to go through the case sheet to confirm whether patients understand their eye problem and whether they are willing to undergo surgery.

### In wards

- Welcoming patients, congratulating them on their decision to undergo cataract surgery, and offering help and answers to their questions
- Orienting patients to the hospital layout, rules and regulations
- Providing preoperative counselling and instructions as well as health education
- Allaying anxieties of nervous patients
- Helping to prepare and send patients to the operation theatre
- Providing postoperative counselling and motivation counselling
- Enquiring patients' health and other problems each morning
- Assisting nurses in administering drops and accompanying doctors in daily rounds
- Allaying concerns of patients' attenders
- Staying informed of hypertensive and diabetic patients and ensuring special diets for these patients
- Arranging free IOL/free food for needy patients
- Helping patients arrange medicines/eye glasses
- Providing discharge counselling



**Compassion is based on the spiritual realisation that you are identified with whom or for whom you work. It is not out of sympathy that you want to help. The sufferer is part of you.**

**- Dr. G. Venkataswamy**

### At screening camps

- Counselling/reassuring/convincing reticent patients advised for surgery
- Helping with camp logistics
- Tracking patient statistics
- Helping the willing patient to come for surgery by convincing the doctors and camp organisers to break the rules, if necessary



**Many villagers who come to Aravind Eye Hospital's free section for treatment of cataract are illiterate and unfamiliar with the hospital environment. Patient counsellors render service to these patients by identifying their needs and concerns, by clarifying their clinical doubts, by explaining the rules and expectations of the hospital (visiting hours, safety, cleanliness), and by providing counselling and education before and after surgery and just before discharge.**

**Many of the patients coming to the hospital feel bad about being unable to help around the house or farm like they used to, due to their reduced vision. Some of the emotions they feel are helplessness, hopelessness, sadness, and low self-esteem or sense of worth. Many have even been neglected by their families. That is why it is very important to make the patients feel that they are wanted, that they are not a burden. Patients should be treated as members of a family to make them feel at home and good about themselves. They are the mainstay of the hospital and the patient counsellor's job, so they should be treated with gratitude and respect.**  
- P. Kothai

For example, at Aravind patients are not allowed to stay at the hospital with their babies. However, in one instance, thanks to the patient counsellor's intervention, a glaucoma patient admitted for surgery was allowed to be accompanied by her baby. She received the treatment she needed because of special care by the patient counsellor.

### Miscellaneous

- Helping to maintain order in the hospital
- Helping to increase follow-up compliance in speciality clinics
- Helping fellow patient counsellors by counselling in other languages
- Arranging accommodation for each batch of patients
- Collecting statistics on patients and dropouts
- Making available required documents for patients (e.g., sick leave certificates)

### Patient counselling guidelines

The most important thing for the patient counsellor to remember is to be respectful and helpful to the patients. Patient satisfaction is one of the goals being sought. Patient counsellors should make themselves available to the patients by brief daily contacts with each of the patients to let them know someone cares about them as individuals. All staff members should conduct themselves and speak in such a way as to show complete respect to the patients, from the poorest to the richest. Patient counsellors should be the clearest model or example of this ideal, and be able to teach it to others.

### Patient counselling can be classified into three main categories or phases:

- A. Preoperative counselling
- B. Postoperative counselling and health education
- C. Discharge and motivation counselling

Other aspects include operation theatre counselling and camp counselling

#### A. Preoperative Counselling Guidelines

- When? After evening rounds on the day before surgery.
- Who? All direct patients and camp patients being operated on the next day.
- Why? To reassure the patients, to deal with their doubts and concerns, and to give important information prior to surgery.

**The result should be a patient pleased with the services provided and who would not hesitate to recommend the hospital to relatives and friends. Every patient who comes to the hospital will know other people who need help, and so can become a good motivator in encouraging others to seek eye care. This will result in better communication between the community and the institution. In turn this will increase the number of patients coming to the hospital, enabling the services to be used more effectively. Medical and nursing staff get more time to concentrate on the clinical aspects of their work. In this way, the service to the individual and the community is improved in quality and quantity.**  
- Raheem Rahmathullah

1. The first thing to be done by PCs is to personally give a heartfelt welcome to the patients, which may be their first personal contact since arriving at the hospital. Patients should be told that the PC's job is to help them feel comfortable and to help them prepare for the operation. If patients have fears, the PCs should reassure them that they will receive excellent medical treatment. All patients should be praised and encouraged for their decision to undergo the operation despite the many obstacles. This reinforces the personal value they place on taking care of their eyes, which is very relevant to the information about to be given.
2. Patients must then be informed that their surgery is scheduled for the next morning, and that they must know the following preoperative instructions. It must be stressed to patients that the most important thing to remember is to fully cooperate with and follow the instructions of the nurses and doctors, for the sake of their vision.
3. Next, PCs will explain to patients that the cataract operation will remove the cloudy part (cataract) of the eye that is causing their blindness. After the operation they will be able to see again, some with the aid of eyeglasses, some without. Also, patient counsellors play an important role in dispelling myths and fears about the anaesthetic injections.
4. After giving the following instructions, PCs should ask patients if they have any questions or concerns about the operation.

#### Preoperative instructions to patients

##### Before Surgery

- Light breakfast is advised.
- Wash your face, hands and feet before leaving your room.
- Ensure your eyelashes have been prepared.
- Carry your case sheet card with you to the operating theatre.
- The theatre nurse will apply eye drops to dilate and an injection and light massage to prepare the eye for surgery.

##### During Surgery

- The operation is painless and lasts only 5-10 minutes.
- Cooperate with the doctor at all times. For instance, open your eye when she/he asks you to, etc.
- Lie quietly and do not touch your face or eye during the operation.

##### After Surgery

- A bandage will be placed over the eye and must be kept in place to keep the eye clean and to prevent infection.
- You will be taken back to your room where you should have complete rest.
- Drink only liquids until a light evening meal normally taken.
- The doctor will check your eye daily or more often to see that it is doing fine and the nurse will administer drops.
- Your vision will return to normal after 40 days. The bandage will be removed on the seventh day after surgery and an eye shade will be provided for one month until glasses are fitted, if necessary.

#### B. Postoperative counselling and health education guidelines

- What? Patient counsellor interaction with patients to respond to their needs and to educate about the eye.

**Aravind's patient counsellors, in the free and paying sections, educate patients on the nature of cataract, preoperative preparation, surgical procedure and the outcome. As a result, the patient who goes in for surgery is "informed" in the true sense of the word. At Aravind, the large volume of patients demands separate preoperative and postoperative counsellors.**

**The latter, stationed in the postoperative wards, educate patients on non-technical postoperative instructions. However, in a small setting, the same counsellor could steer the patient from admission to discharge.**

**After discharge, "satisfied patients" often bring with them other patients requiring cataract surgery thereby increasing community participation.**

**At Aravind, besides cutting down effectively on the surgeon's time, successful counselling, as indicated by a follow-up rate of 98.4%, contributes synergistically to the whole process of a successful cataract surgery. In response to a felt need expressed by professionals in eye care, Aravind has evolved a two-week course in patient counselling.**

**- Dr. G. Natchiar**

- When? Beginning the day after surgery, during daily interactions with patients.
- Why? To continue personal contact with patients in order to assess and influence patient satisfaction, reinforce proper eye care while in the hospital, and instruct patients in health education and disease prevention.



- Who? All postoperative camp and direct patients.
  - How? Patient counsellors will decide which rooms need to be attended to so that all patients are contacted at least twice (postoperative and discharge counselling) during their stay following surgery.
1. On entering the room, PCs should gently remind and guide the patients to rest in the correct position, if necessary. If eye patches are loose, PCs can retie them securely.
  2. This is the time for PCs to ask about and respond to patients' concerns and doubts, and make note of them. This is also a good time to give the patients basic information about other services available at the hospital.
  3. Cataract education should take place before the final discharge counselling so that patients understand the nature of their problem. Enough patients must be scheduled for cataract education each day per PC (twice the amount if working in pairs) to ensure that all patients receive this education. PCs must develop a clear format for teaching patients in simple terms about cataract, using large poster boards and three-dimensional eye models. This education session should last only 10-15 minutes. Follow-up questions should be posed to a few patients to see if counselling was effective in increasing the patients' understanding of cataracts and their treatment.
  4. The personal attention given to patients by PCs may be the most attention they have received in a long time. The simple act of going into their rooms to talk with them and to spend some time with them is immeasurably helpful to the patients' well-being, recovery and satisfaction.

#### Postoperative Instructions to Patients

- Do not strain yourself while coughing or sneezing, or during motion.
- Begin taking your normal food from the day of surgery.  
[If the direct patients are not able to provide their own food, PCs must assess the situation by gathering information, and then get permission from the Senior Medical Officer for free food.]
- Be assured that the pain will gradually decrease until the patch is removed in one week.  
[Patient counsellors must try to carefully assess how much pain patients are in, when they took their last pain pill, whether they have nausea, etc. Sometimes patients simply need to tell somebody and complain a little bit. After discussing pain, PCs should change the subject to get the patients' minds onto something else so they feel better.]
- Remember not to touch your eyes, especially the operated eye, during recovery.
- The doctor will come for daily rounds or more often to check on your eye, and a nurse will put drops in the eye. You will need to have somebody put drops in your eye every day for one month when you return home, so notice how the nurse does it.

**At the free hospital, we give direct patients the date and time for their follow-up visit before they leave the hospital, writing the appointment right on their discharge instruction sheet itself. Camp patients are informed of the date, time and venue for the follow-up camp in their community. Out-of-state patients are given the names and addresses of ophthalmologists who trained at Aravind.**

**- P. Kothai**

- Remember that you can make use of the other services (optical shop and pharmacy) here in the hospital.

### C. Discharge and motivation counselling guidelines

- When? The day of or before discharge.
  - Why? To give final postoperative advice and to teach patients to become advocates and motivators of proper eye care for others in their village.
1. PCs should check to see which patients on their floors are to be discharged each day, and decide ahead of time how, when and where to meet with them. It is best to meet in small groups, 15 people or less, to allow for more interaction. Discharge education can be done by one PC or in pairs.
  2. By this time the patients are familiar with their surroundings and may have formed opinions about their treatment while at the hospital. PCs should invite any comments or suggestions the patients would like to make.
  3. It is time to tell patients that they will be leaving soon to return home, but that they must continue to take good care of their eyes. PCs will go over the patients' discharge card or eye care pamphlet to read and discuss it point by point.
  4. Demonstrating with an empty bottle of eye drops with dropper, PCs will teach patients how to open a new bottle, how to affix the dropper cap after each use, frequency of use, the palm-on-forehead technique that nurses use to administer eye drops, etc.
  5. PCs must emphasise the importance of cleanliness in preventing infection of the eye and disease in general.
  6. PCs must clearly explain follow-up actions that patients need to take in order to have the best possible vision. In some cases, eyeglasses will be needed to fully restore sight.

#### Instructions for patients after discharge

1. For a period of 30 days, put eyedrops in your operated eye, following the instructions given by staff at the time of discharge.
2. Wear the given sterile fresh eye bandage under the eye shield every day for the next five days. Then to protect the eye at night, you must wear the shade (cotton cloth) alone for the following 25 days while sleeping. You must also wear the shade during the day for 25 days if not protecting the eye with protective eye wear to keep out dust particles.
3. Redness, watering of eyes, and a little irritation are common and you need not worry about this. But if it becomes unbearable, consult an eye specialist immediately.
4. Body wash can be taken from the third postoperative day but head bath is not recommended until the doctor advises, at the 30th day follow-up visit.
5. No restriction in food except that hard foods should not be eaten, to avoid straining the eye.
6. Tobacco chewing, smoking, and taking alcohol are strictly prohibited for at least 30 days.
7. Please refrain from being in smoke-filled and dusty places and straining the eye by frequent TV watching and reading.
8. Self-shaving is allowed after seven days.
9. You must come here after 30 days for review with the follow-up card given to you at discharge.
10. For further information, do approach the ward secretary/nurse or patient counsellor.

Get Well Soon



## Possible challenges for patient counsellors

1. Educating (through demonstrations and readings) patients who cannot read and patients who cannot see
2. Dealing with medically complicated issues
3. Ensuring good care for patients with no attenders
4. Reassuring patients who are undergoing other types of treatment or surgery
5. Dealing with exceptions to rules and regulations
6. Avoiding patient dropouts
7. Scheduling and balancing regular and urgent demands
8. Working effectively and efficiently with other staff
9. Dealing with poor care given by another patient counsellor or other staff member
10. Controlling attenders' behaviours and anxieties
11. Explaining poor outcomes to patients
12. Understanding the psychology of extremely anxious or needy patients

**This morning I visited the free hospital with the coordinator to see what the patient counsellors' responsibilities are. They are really playing a key role in keeping the voluminous number of patients rolling through, keeping quality of patient care high.  
- Seva volunteer from Canada**

A woman was taken to the operation theatre, but panicked in the block room and refused to undergo cataract surgery. The attending physician recommended discharging the patient because her blood pressure then was too high to undergo surgery. When a patient counsellor was called in, she learned that the patient's panic stemmed from fear about the operation. The PC gently explained to the patient the cataract surgery procedure and introduced her to others who had already undergone the surgery and who were able to reassure her. The patient later decided to undergo the cataract surgery.

## Contributions of patient counsellors

### Patient counsellors contribute to high quality cataract surgery outcomes

- by ensuring relaxed, confident patients in the operating theatre and through adequate preoperative instructions and counselling
- by their presence in the block room, when necessary
- by providing effective postoperative, discharge, and follow-up counselling
- by helping patients to realise the importance of their follow-up visits.

### Patient counsellors contribute to large volume cataract surgery

- by helping to keep the flow of patients smooth in the OPD, the wards, and the operating theatre
- by taking responsibility for patient counselling that would normally take up the time of doctors and nurses
- by convincing former patients to have their other cataract removed
- by ensuring patients' satisfaction with the care and treatment they receive
- by encouraging satisfied patients and their attenders to serve as patient motivators in their home towns, among family members, relatives, friends, neighbours, colleagues and acquaintances.

## Patient counsellors contribute to sustainable cataract surgery

- by performing many patient care services, thereby allowing doctors and nurses to concentrate their valuable time and expertise on clinical services
- by counselling and motivating many reticent and fearful patients, thereby increasing the volume of surgery
- by counselling and educating patients in groups, for economies of scale.

## Conclusion

Including patient counsellors in a cataract surgery programme can lead to higher quality, larger volume and greater sustainability. This innovation emphasises patient care while freeing up medical staff to concentrate on clinical care.

### Patient Care at Aravind Eye Hospitals

1. Patients must be disposed with full satisfaction.

நோயாளிகள முழுதிருப்தியுடன் அனுப்ப வேண்டும்

2. All staff must attend duty with punctuality.

பணியாளர்கள் பணிக்கு சரியான நேரத்தில் வரவேண்டும்

3. All staff must be conscious of the importance of patients attending the hospital and the care given to them.

மருத்துவமனக்கு வரும் நோயாளியின் முக்கியத்துவத்தையும் அவர்களுக்கு அளிக்கப்படும் சேவ குறித்தும் அனத்துப் பணியாளர்களும் அறிந்திருக்க வேண்டும்.

4. The staff should not quarrel among themselves in front of the patients. Similarly senior staff should not scold junior staff in front of patients.

நோயாளிகளுக்கு முன் பணியாளர்கள் தங்களுக்குள் சண்ட போட்டுக் கொள்ளக்கூடாது. அதே போல் மூத்த பணியாளர்கள் தங்களுக்கு கீழ் உள்ள பணியாளர்கள நோயாளிகளுக்கு முன் திட்டக்கூடாது.

5. There must be full co-operation and team spirit among the staff while doing their work. வேல செய்யும் போது பணியாளர்களிடயே கூட்டுமுயற்சியும், ஒற்றும மனப்பான்மயும் இருத்தல் வேண்டும்.

6. Staff must extend the same treatment and respect to both the paying patients and the free patients. There should not be any discrimination.

இலவச பிரிவு நோயாளிகளயும், பணம் செத்தும் நோயாளிகளயும் பாரபட்சமின்றி பணியாளர்கள் ஒரே மாதிரி சிக்ஷ யயும் மரியட தயயும் கொடுக்க வேண்டும்.

7. All staff must work hard to improve the prestige, efficiency and dedication of the hospital.

மருத்துவமனயின் பெயர், திறன், மற்றும் சேவ மனப்பான்ம மேம்படும் விதமாக பணியாளர்கள் கடினமாக உழக்க வேண்டும்.

At Aravind Eye Hospital, a “motivation card” is sent home with outpatients from the free hospital who have not opted for cataract surgery. The purpose of the card is to encourage them to come back for surgery as soon as possible, and it provides important information for these prospective patients.

## Aravind Eye Hospital Free Section

To the notice of family members,

Hello,

Mr. / Mrs. \_\_\_\_\_ is suffering from defective vision because of cataract in RE / LE. She / he is unwilling to undergo surgery stating the following reason(s) \_\_\_\_\_

to avoid permanent loss of vision, cataract surgery has to be done immediately. Cataract surgery with IOL insertions costs Rs. 500/- only. Treatment and accommodation is free. Please bring him / her without delay.

Contact Room No.12 for details

## Aravind Eye Hospital Free Section

1, Anna Nagar  
Near Anna Bus Stand  
Madurai 625 002  
Tel No. 532653

(Bus Route: All buses to Anna bus stand and Anna Nagar)

OP No. / IP No. \_\_\_\_\_

Camp Place \_\_\_\_\_

Date \_\_\_\_\_

PC Name \_\_\_\_\_

அரவிந்த் கண் மருத்துவமனை  
இலவசப்பிரிவு

குடும்பத்தாரரின் கவனத்திற்கு,  
வணக்கம்,

\_\_\_\_\_ வின் வலது இடது கண்ணிள்ள புரயினால், பார்வையிழப்பு ஏற்பட்டுள்ளது. நிரந்தர பார்வையிழப்புத் தடுக்க வேண்டுமெனில் உடனே அறுவை சிகிச்ச செய்து புரய அகற்றிட வேண்டும், \_\_\_\_\_

காரணங்களுக்கிடிக் காட்டி அறுவை சிகிச்சுக்கு சம்மதிக்கவில்லை. புர அகற்றி லென்ஸ் பொருத்த ரூபாய் 500 மட்டுமே. சிகிச்ச மற்றும் தங்கும் வசதி இலவசமாக வழங்கப்படுகிறது. தாமதிக்காமல் அறுவை சிகிச்சுக்கு அழித்து வரவும்!

மேம் விபரங்களுக்கு அற எண் 12 ய அணுகவும்

அரவிந்த் கண் மருத்துவமனை  
இலவசப்பிரிவு

1, அண்ணாநகர்,  
அண்ணா பேருந்து நிலயம் அருகில்  
மதுர 625 020  
தொலைபேசி எண் 532653

அண்ணா பேருந்து நிலயம் மற்றும் அண்ணாநகர் செல்ம் அனத்து பேருந்திம் வரலாம்

வெளி நோயாளி/முகாம்

OP No./IP No. \_\_\_\_\_

முகாம் நடந்த ஊர் \_\_\_\_\_

தேதி \_\_\_\_\_

நோயாளிகளுக்கான

ஆலோசகரின் பெயர் \_\_\_\_\_