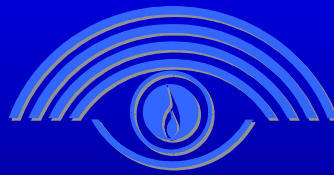


Role of Mid Level Ophthalmic Paramedical staff (MLOPS) in Developing countries

**Dr.Usha Kim,
Aravind Eye Hospital, Madurai**



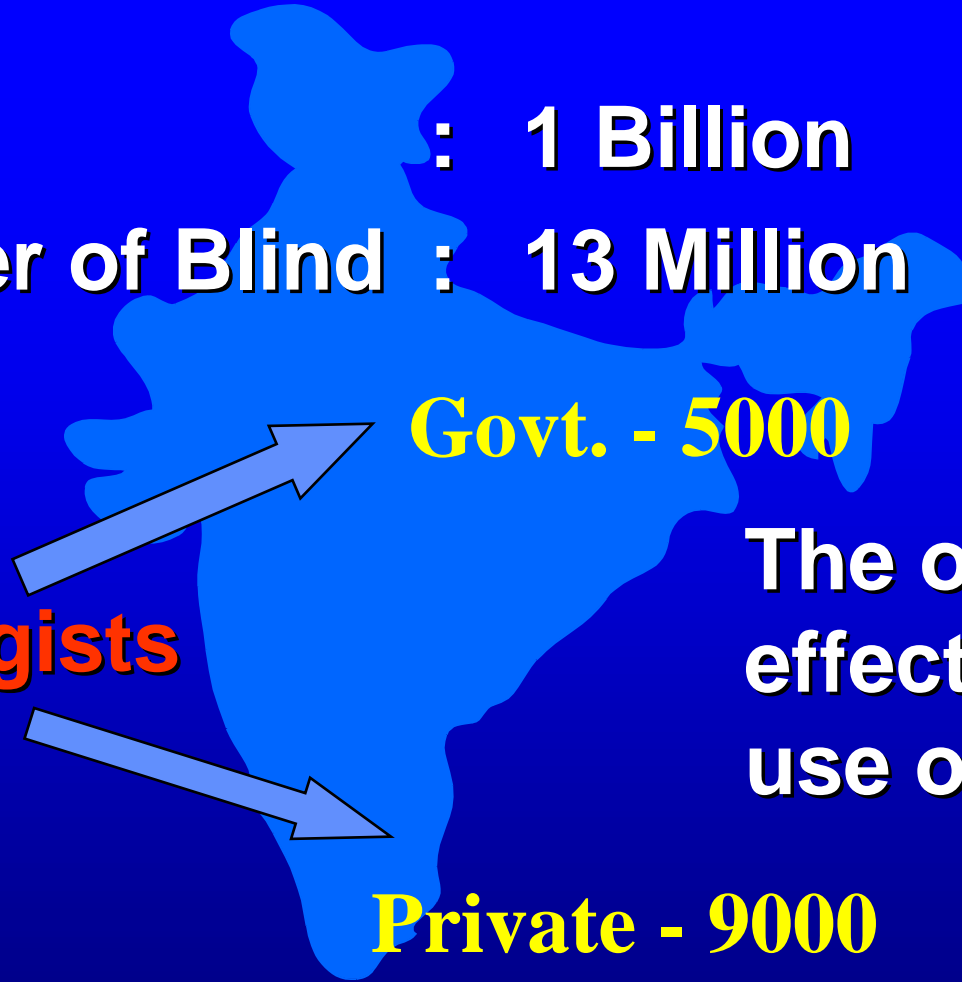
Aravind Eye Care System

Estimates of Blindness in India

Population : 1 Billion

Est. number of Blind : 13 Million

**Available
Ophthalmologists**



Govt. - 5000

Private - 9000

The only Cost effective option is use of MLOPs



Role of MLOP

- ⌘ Patient evaluation
- ⌘ Monitoring
- ⌘ Diagnostic tests
- ⌘ Surgical assistance
- ⌘ Counselling

Skilled Support staff,
Not independent decision makers
Main work force in the hospital setting

Impact on the Ophthalmologist

- ⌘ More surgery
- ⌘ Improve quality
- ⌘ Training

Ideal Ratio:
4 MLOPs per ophthalmologist
(hospital setting)



Training programs available

Govt formal programs -
PHC level

Private formal
programs –
institutional needs

Based on individual
practice On the job
training

*Variation in
quality of training*



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Volume Handled Per Day

€ 4000 outpatients

€ 700 surgeries

Number of
ophthalmologists - 251



Pondicherry (2003)



Theni (1984)



Coimbatore (1997)



Madurai (1978)



Tirunelveli (1988)



Challenges

- ⊘ Ensuring quality in clinical outcomes
- ⊘ Ensuring patient satisfaction
- ⊘ Equity in care

Ensuring Clinical Quality

- ⊘ Through Delegation of work
- ⊘ **Routine skill based repetitive work are delegated to Paramedical staff**



ARAVIND EYE CARE SYSTEM, MLOP's STRENGTH

Sno	Dept.	Madurai		Theni		Tirunelveli		Coimbatore		Pondicherry		Total
		Permanent Staff	Trainees	Permanent Staff	Trainees	Permanent Staff	Trainees	Permanent Staff	Trainees	Permanent Staff	Trainees	
		1	OP	45	38	3	4	21	25	29	26	
2	Ward	19	28	2	2	9	12	14	12	11	11	120
3	Refraction	27	70	6	3	13	17	21	20	14	17	208
4	Theatre	57	64	4	3	16	25	18	36	12	33	268
5	Housekeeping	18	21	2	1	2	14	5	10	6	13	92
6	Counsellor	19	24	1	3	14	8	16	17	16	17	135
7	Reception	17	22	2	2	10	12	13	13	16	17	124
	TOTAL	202	267	20	18	85	113	116	134	86	133	1174



Training Programme at Aravind

- € Started 27 years ago
- € To counter the non availability of the trained personnel
- € Was a cost effective model which involved an
- € In house training and was need based and specific to the job



Recruitment

Man power
requirement is
assessed every year

Marketing

Through word of
mouth
For 200 positions -
1000 applications



Selection Criteria

Written exam

Interview with the candidate and the family

- Education** - 12th (H.S.C) standard with a science background
- Age** - 17-18 years
- Experience** - Fresh candidates with no work experience
- Background** - Rural, low income family
- General physique** - job specific
- Personality** - job specific



Admission

- ⌘ Letter to the parents with a detailed description of the job and the norms of the institution
- ⌘ The candidate with the parents are addressed with the history of Aravind ,its participation in the community and also the role of each of the categories in the ultimate mission and vision of the institution



Structure of the Two Years Training Programme



Transfers through all hospitals



Evaluation

- ⌘ Weekly Assessment
- ⌘ Log books with indicators
- ⌘ Examination viva, practical performance and clinical test,
- ⌘ Problem solving

Strengths

- ⌘ Accredited by JCAHPO
– only Non American,
Canadian centre in the
world



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OP

21-2-2006



Refraction

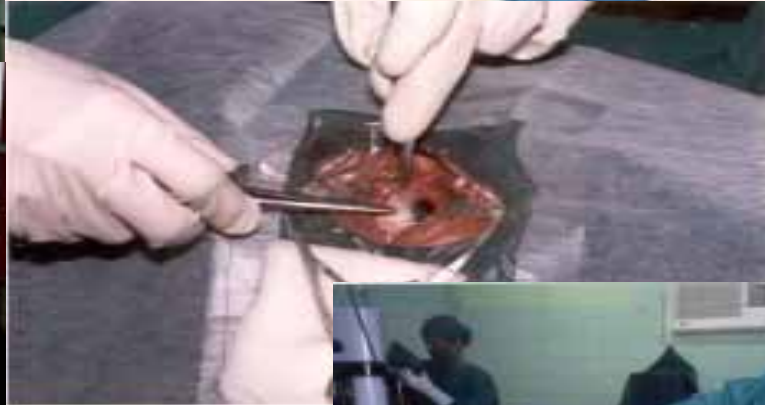


Optical Dispensing System

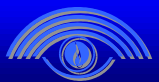


Ward





Operating room



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Camp



ARAVIND EYE CARE SYSTEM

High volume surgery

Set-up within a OR

Surgical team:

∕ Ophthalmologist	- 1
∕ Scrub nurses	- 2
∕ Sterilization nurse	- 1
∕ Circulating nurse	- 1
∕ Theater assistant	- 1

Equipment:

∕ Surgery tables	- 2
∕ Op. Microscope	- 1
∕ Instrument sets	- 6-10

Average patient turnover
per surgeon per hour : **8 - 12 cases**

Total patient turnover
per surgeon for 6 hrs : **45 - 60 cases**



Hierarchy of each subset

- € Supervisor
- € Senior workers
- € Junior workers
- € Trainees

Career options

- € Trainee
- € Employee
- € 5 years –supervisor , trainer-
done after assessment and
provided with monitory
benefits
- € Rotations ,deputations
- € Vision centres, community
centres



Rural Vision Center

Screened by Paramedic

- WLL connectivity of n-Logue (36.5Kbps)
- Allows Videoconferencing with webcam



Vision Center

Data Compressed by
Specialised Software



Grounds for Interaction

- ⌘ Intra - departmental meetings - space for ideas and innovations
- ⌘ Interdepartmental meetings for supervisors -space for recognition
- ⌘ Teleconferencing every Thursday among 5 satellites - space to set norms
- ⌘ Journal club meetings once a month and
- ⌘ CME twice a year for all categories for academic up gradation



Immediate focus

- € Review the current status and Demand for MLOPS
- € Review the training curriculum
- € Accrediting training programmes
- € Setting up benchmarks



Conclusion

- ⌘ Trained MLOPs are required in large numbers for efficient eye care system
- ⌘ Realisation of their contribution is crucial to fulfil the Vision 2020 goals



Thank You

