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

The only Cost effective option is use of MLOPs

Private - 9000
Impact on the Ophthalmologist

More surgery
Improve quality
Training

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

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
Volume Handled Per Day

- 4000 outpatients
- 700 surgeries

Number of ophthalmologists - 251
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

<table>
<thead>
<tr>
<th>Sno</th>
<th>Dept.</th>
<th>Madurai</th>
<th>Theni</th>
<th>Tirunelveli</th>
<th>Coimbatore</th>
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<td>267</td>
<td>20</td>
<td>18</td>
<td>85</td>
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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

- **Orientation & Basic Training** (4 Months)
- **Assessment** (Theory and Skills)
- **Specialty Training** 8 Months
  (The students are assigned only to one of the following eleven areas)
  - OP
  - Refraction
  - OT
  - Ward
  - Counselling
  - Optical Tech.
- **Practical Training**
  Supervised Work in Specialty (6 Months)
- **Probation**
  Independent Evaluated Practice (6 Months)
- **Final Assessment**

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
Optical Dispensing System
Ward
Camp
**High volume surgery**

**Set-up within a OR**

<table>
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<td>Op. Microscope</td>
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<td>Theater assistant</td>
<td>Instrument sets</td>
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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

Data Compressed by Specialised Software

Specialty Center

Vision Center

ARAVIND EYE CARE SYSTEM
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 upgradation
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.