Current status of paediatric eye care in Asian countries

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Introduction

- House for 1 million blind children
- Causes are variable in different regions
- Available manpower and services are not uniform.
- Service dependable on external funds
- Late presentations are not uncommon
Introduction

- Quality of service diversified even inside the country– Basic to advanced
- No mechanism existing for routine screening of babies in NICU and thereafter
- Inadequacy in anaesthesia facility- almost uniform
- Lot of NGO's make an effort to improve the case finding, quality care, training HR, funding for setting up the speciality etc
India-The Need..

- 407 million children
- 3,200,000 blind (20% of worldwide)
- 960,000 children are with Low vision
- Blindness – 6.5/10,000
Currently available infrastructure...

- Most equipped to provide basic services only
- Refraction services by general ophthalmologist
- Refractionist available at CHC
- Only 0.63 ped oph unit per million
- No screening or referral protocol
Tertiary centres
How are we equipped

Cake Decoration

Keeler acuity

Fixation preference

Cardiff card
Improved Examination Techniques

Keeler card

SG Chart

Hand slit lamp

Handheld keratometer
VEP Recording

ERG under General Anesthesia

Active Vision Stimulation with Colored Running Lights
Electro Video Nystagmogram

Preop

Postop
Paediatric Cataract

- Lot of understanding on the etiology especially of CRS as a cause
- Anaesthesia: Availability of good neonatal anaesthetist, newer induction and maintenance Drugs, laryngeal airways mask
- Possible to take grade III risk patients also for surgery
Surgical Revolutions

After cataract

PC opacification

Automated vitreector
Aphakic Rehabilitation - Nil to spectacles, contact lenses to IOLs now
ROP screening and Treatment (A2Z USAID PROJECT)

Ret cam

Laser
ROP Screening

- Protocol is there, HR is getting better
- Implementation of the programme is not uniform
- Awareness among neonatologists\ paediatricians and their role in referral
- Quality NICU care is not available to all
- Awareness among parents almost nil
- More IVF babies with vision impairment
At present, controlled chemotherapy with newer and effective drugs

BEFORE CHEMOTHERAPY

AFTER CHEMOTHERAPY

DAY 1

AFTER 6 MONTHS REVIEW
Visual rehabilitation in children

- More understanding on visual maturation has made possible to rehabilitate these children even with multiple developmental delay.
- Only very few institutes offer this
- No existing network of referral on this
- No registry on this disability
Integrated education
Existing Refractive services - Aravind

- Train the teachers
- 6/9 chart and 6m rope
- Each teacher – 100 students
Concept of pediatric camps

- To cover up the lacunae
- Find a sponsor & fix a date
- Local publicity
- Screening by optometrist
- Final treatment by pediatric ophthalmologist
Perceptions at the public level on paediatric eye diseases

- Focus group discussion with 16,551 persons residing in 24 hamlets
- Common perceptions were: Strabismus was not treatable, and that it does not lead to loss of vision, is also a sign of luck
- Lack of uniform treatment advise among doctors
- Children below 4 years should not wear spectacles
- No necessity for periodic vision testing
- Did not consider vision impairment as among the top ten eye problems among children
- Uptake of service is better with field worker screening, and outreach services
Positive Developments

- Awareness increasing regarding the comprehensive paediatric eye care
- Paediatric oriented ophthalmologists are mostly self made drawn from the general pool with some formal training in the field
- Increased interest among young ophthalmologists
- ORBIS has come with strategies to set up 50 paediatric ophthalmology units at tertiary care centres in near future
Bangladesh

- Involvement of ORBIS International have helped them to increase their human resources and the infrastructure facility in the past decade
- Currently almost the total population is getting covered
- Funds seems to be not a problem
- Still needs constant improvement
In Nepal

- To add slides from Dr. Karthik
Pediatric Ophthalmology services in Nepal


% of children – 43 to 45 % of population

5 years before (Recent Past)

1. Number of fellowship trained pediatric Ophthalmologists -4
2. Number of pediatric Ophthalmologists in Kathmandu – 3 (75%)
3. Number of anesthetists at peripheral eye hospitals (outside Kathmandu) – 1
4. Eye Institutes with separate pediatric eye department – 3

Now

1. Number of fellowship trained Pediatric Ophthalmologists – 9
2. Number of pediatric Ophthalmologists in Kathmandu -5 (55.5%)
3. Number of anesthetists at peripheral eye hospitals – 1
4. Eye Institutes with separated pediatric eye department - 4
5. Photographer’s awareness programme.
6. Retinoblastoma
7. Pre -School Screening (Oral polio immunization)

There are an increasing number of pediatric ophthalmologists and pediatric eye care centers which is very good news but no corresponding increase in the anesthesia services which Is really disappointing as the pediatric eye services greatly depend on the anesthesia services for proving comprehensive pediatric eye care.

5 years from now,

1. Chemotherapy for Retinoblastoma at peripheral center / centers
2. Photographers training
3. Pre -School Screening (combining with Oral polio immunization) – Make it a national wide program
4. To increase the quality and availability of regular anesthesia services especially in the peripheral centers.

Anesthesia services

The availability of regular anesthesia services is critical in further improving the pediatric eye care services especially in peripheral centers (Outside Kathmandu valley)
Other Asian countries

- Bhutan: 1 trained paediatric ophthalmologist for the whole country
- Myanmar: Self trained paed care ophthalmologists
- Maldives: No subspeciality practice exists, population is low
- Sri Lanka: Fairly good tertiary care available, then not uniform
- Pakistan and neighbouring countries?
Future expectations

- Routine screening and referral protocol at all ages
- Improved manpower and infrastructure
- Uniform distribution of secondary and tertiary centres
- Total eradication of Vitamin A deficiency and CRS
- Good networking with other paed specialities
- Involvement of the govt sector
- Help from NGOs for case finding and service delivery
Thank You