GUIDELINES ON DEVELOPING A FELLOWSHIP PROGRAM IN PEDIATRIC OPHTHALMOLOGY AND STRABISMUS

AMERICAN ASSOCIATION FOR PEDIATRIC OPHTHALMOLOGY AND STRABISMUS

INTERNATIONAL AFFAIRS COMMITTEE

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INTRODUCTION

The purpose of these guidelines for new international pediatric ophthalmology training programs is not to dictate rigid rules, but to provide a matrix that can be modified to suit the needs of the individual programs. The underlying guiding principle is that the pediatric ophthalmologist is an advocate for children in his or her region for problems related to eye and diseases.

In addition to the standard knowledge and skills associated with the practice of pediatric ophthalmology, additional knowledge in epidemiology of childhood blindness in their regions and certain aspects of community eye care should be desirable goals.

Childhood blindness is the second most common cause of severe visual impairment of the world when considered from the aspect of blind years. All children deserve major efforts to reduce avoidable causes of visual impairment and to maximize vision in both eyes by whatever means necessary. Children are the future of a nation and if they are to be productive members of society, they should have as good vision as possible.

In this booklet you will find general guidelines and recommendations on how to develop your own program, Books and Journals recommendations, bibliographic references and examples of fellowship programs and handbooks for fellows from other countries.
A. MAKE A CLEAR SITUATION ABOUT THE NEED FOR SUCH A PROGRAM IN YOUR COUNTRY

1) Collect the following data:
   a. General data of the country
      i. Country area
      ii. Population distribution
      iii. Income
      iv. Birth rate
      v. Mortality rate
   b. Data on childhood blindness
      vi. General Health data of the country
      viii. Blind School Survey Data
      ix. Hospital Data for Childhood Blindness (if possible from all pediatric eye units of the country)
      x. Screening Programs for Childhood Blindness
      xi. Screening Programs for Amblyopia.
      xii. Screening Programs for detection and treatment of ROP.
   c. Data on infrastructure
      xiii. Structure of the Health Administration of the Country
      xiv. No. of Eye Departments and or Eye Hospitals
      xv. No. of Pediatric eye units in the Country
      xvi. No. of Neonatal Units.
      xvii. Provision of Primary Eye Care, Secondary Eye Care and Tertiary Eye Care.
      xviii. Low vision Care centers.
   d. Data on Human resources.
      i. No. of Ophthalmologists.
      ii. No. of Pediatric Ophthalmologists or Pediatric Oriented Ophthalmologists.
      iii. No. of Ophthalmologists who sub specialized in strabismus
      iv. No. of Optometrists
      v. No. of Ophthalmic Nurses
      vi. No. of Low Vision specialists
      vii. No. of Ophthalmic technicians
2) Once collected this data make an assessment of need (estimates)

<table>
<thead>
<tr>
<th>Births/year</th>
<th></th>
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<tbody>
<tr>
<td>Total aged 0-15 years</td>
<td></td>
</tr>
<tr>
<td>Prevalence of blindness</td>
<td>/1,000</td>
</tr>
<tr>
<td>Number of blind children</td>
<td></td>
</tr>
<tr>
<td>Number with low vision</td>
<td>X3 blind</td>
</tr>
<tr>
<td>Major causes of blindness</td>
<td></td>
</tr>
<tr>
<td>Major avoidable causes</td>
<td></td>
</tr>
<tr>
<td>New cataract/year</td>
<td>1/6,000 births</td>
</tr>
<tr>
<td>New glaucoma/year</td>
<td>1/10,000 births</td>
</tr>
<tr>
<td>Percentage of premature babies</td>
<td></td>
</tr>
<tr>
<td>(&lt;1,500g)</td>
<td></td>
</tr>
<tr>
<td>Prematures to screen/year*</td>
<td></td>
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<tr>
<td>Prematures to treat / year</td>
<td></td>
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</tbody>
</table>

* Worked out using the following estimates: % all births which are <1,500 gms; % access to neonatal care; % survival
** % of above with threshold disease

2. Available resources:

<table>
<thead>
<tr>
<th>Human Resources:</th>
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<tbody>
<tr>
<td>Ophthalmologists</td>
</tr>
<tr>
<td>Ophthalmologists trained in paed./strabismus (PO)</td>
</tr>
<tr>
<td>Optometrists</td>
</tr>
<tr>
<td>Ophthalmic nurses</td>
</tr>
<tr>
<td>Orthoptists</td>
</tr>
<tr>
<td>Paramedics/technicians</td>
</tr>
<tr>
<td>Low vision specialists</td>
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</table>
B. CONTACT LOCAL AUTHORITIES IN ORDER TO EXPOSE THE PROJECT AND SEEK FOR THEIR COLLABORATION.

1) Contact authorities from the Government, especially at the Ministry of Health.

2) Contact authorities from Local Ophthalmologic Societies in order to present them the project and get an idea which will be their attitude and disposition towards this Program.

3) Communicate with other medical specialists/organizations responsible for children’s health in your country.

C. ESTABLISH WHERE THE PROGRAM SHOULD TAKE PLACE AND HOW LONG SHOULD IT LAST

Although the clinical facilities where the pediatric ophthalmologist establishes an office may not be as complete as in training institutions, it is appropriate that high standards exist in the training institutions. This would include a well-equipped operating room, reliable anesthesia, the availability of other subspecialties in ophthalmology and ideally, a community health program. It is advisable that at least 50% of the training program is spent at the mother institution.

D. JOIN ALL THE PERSONS RESPONSIBLE FOR THE PROGRAM AND ESTABLISH THEIR DUTIES AND RESPONSABILITIES.

Establish a program director and the faculty of the program.
E. ELABORATE THE CURRICULUM

F. DEVELOP A HANDBOOK FOR FELLOWS. (MANUAL OF PROCEDURES)

G. ESTABLISH EVALUATION PROCEDURES AND CERTIFY THE SATISFACTORY COMPLETION OF THE COURSE OF TRAINING BY THE FELLOW AT THE END OF THE TRAINING PROGRAM.

H. DETERMINE THE PROFILE OF SUBSPECIALIST YOUR COUNTRY NEEDS.
This will give you an idea of the selection criteria you will need for candidates for this program.

I. MAKE PERIODIC REVIEWS AND EVALUATIONS OF YOUR PROGRAM EITHER BY YOUR OWN INSTITUTION OR OTHER NATIONAL OR INTERNATIONAL GROUPS.
Books

1. **Paediatric Ophthalmology and Strabismus.** David Taylor and Creig S. Hoyt. Saunders Ltd; 3rd edition. 2004 (out of print)
   *4th edition available Summer 2012*


   **Available online**
   [http://one.aao.org/CE/EducationalProducts/BCSC.aspx](http://one.aao.org/CE/EducationalProducts/BCSC.aspx)


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** Full text available online FREE on ORBIS website: http://telemedicine.orbis.org/bins/content_page.asp?cid=1-2161
** Full text available online FREE on ORBIS website: http://telemedicine.orbis.org/bins/content_page.asp?cid=1-351
27. Estrabismo. David Romero y Apis. Editorial DALA. 1era edicion. 2010 (Spanish)
**More free access books at ORBIS website:**
http://telemmedicine.orbis.org/bins/content_page.asp?cid=1-1808

**Journals**

1) **Journal of the American Association of Pediatric Ophthalmology.**
   www.jaapos.org
2) **Journal of Pediatric Ophthalmology & Strabismus.**
   Published by Slack Incorporated.
   http://www.slackjournals.com/jpos
3) **American Orthoptic Journal.**
   http://aoj.uwpress.org/
4) **Binocular Vision & Strabismus Quarterly.**
   http://binocularvision.net/
5) **Strabismus.**
   http://informahealthcare.com/toc/str/20/1
6) **British & Irish Orthoptic Journal.**
   http://www.orthoptics.org.uk/BIOJ
7) **Australian Orthoptic Journal.**
   http://www.orthoptics.org.au/OAA07/content/view/38/31/
Websites and online resources

   http://telemedicine.orbis.org/bins/home.asp
2. The Strabismus Minute. ORBIS.
   http://telemedicine.orbis.org/bins/content_page.asp?cid=1-3
3. Pediatric Eye Disease Investigator Group
   http://pedig.jaeb.org
   http://pedig.jaeb.org/Publications.aspx
5. AAO community groups: Pediatric Ophthalmology/Strabismus
   http://www.aao.org/community/groups
   http://redatlas.org/main.htm
   http://emedicine.medscape.com/ophthalmology
9. Online resourced of ophthalmology.
   http://www.eophtha.com/eophtha/index.html
10. David Granet Pediatric ophthalmology and Strabismus list-serv
    https://mailman.ucsd.edu/mailman/listinfo/ped-ophth-l
11. LEOP: Lista de Estrabismo y Oftalmologia Pediatrixica (Spanish)
    To be included email: Julio Prieto Diaz at
    prietojulio@speedy.com.ar
Articles- In Progress

2. BLOCK- ROP
3. CRYO-ROP
4. ET-ROP
5. Amblyopia Treatment Study
6. Aphakia Treatment Study- PEDIATRIC CATARACT VIDEO