CONCEPTS OF PRIMARY EYE CARE

**Eye Diseases**

- TRACHOMA
- CATARACT (DIABETIC RETINOPATHY)
- ACUTE RED EYE

**Who Can Be Involved**

- Teachers, Community Leaders
- Traditional Birth Attendants / Healers
- Primary Health Care Workers
- Community Based Rehabilitation Workers
- Optometrists
- General Physicians

**Activity**

- PRIMARY PREVENTION
  - in the community through PHC
- SECONDARY PREVENTION
  - identification and treat in the community

- IDENTIFY AND REFER
  - FOR TREATMENT
- DIAGNOSE AND TREAT
  - or DIAGNOSE AND REFER

**Priority = (M \times I \times V) / C**

**Primary Eye Care**

**Clinical Service Component**

Community diagnosis precedes primary eye care activities and may give a different outlook regarding eye health of individual communities. This leads to adapted service components, according to social and economic standards, as well as the available system of health care. Essential elements, therefore, vary accordingly and may not include only the well known major blinding conditions. In addition, common eye disorders found in individual communities require simple but adequate services.

**Essential Components of Primary Eye Care**

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**Introduction**

Primary eye care activities cover the following two areas of community health services:

1. Clinical service component
2. Eye health protection and promotion component

It is most important that most activities are initiated and sustained by community members themselves. The eye sector helps the community, complementing what they do in their day-by-day activities.

The essential elements of primary eye care should be determined by careful study providing a `community diagnosis`, based on an epidemiological approach. The study will list community eye problems in order of priority. To this end the study should be planned to include the following information:

1. **Magnitude**: M – prevalence and incidence, given by the number of community members suffering from particular conditions and new cases expected in a given period of time.
2. **Implication**: I – social and economic consequences from the condition, given in terms of expenditures, work loss, absence from school, etc.
4. **Cost**: C – resources needed for control programmes.

Priority may be known from:

\[
\text{Priority} = \frac{(M \times I \times V)}{C}
\]

This is a simple model illustrating scientific application in planning. It should avoid instinctive preferences based only on clinical experiences.

**Service Components of Primary Eye Care**

Service in the community should be sufficiently comprehensive to cover aspects of primary, secondary and tertiary prevention targeted for all community members whether they have or do not have eye problems. This is the point where community-based care differs from hospital-based services.

It begins with an understanding of any community at a point in time, and recognises three groups of people in need of eye care screening:

1. Healthy group.
2. The group with certain eye diseases or problems.
3. The group at risk of eye diseases or problems.

Hence, services should not only be clinical, but equal or more attention is needed for people without disease. Primary eye care, therefore, covers the whole range of eye health care for all community members.
Primary Eye Care

particular to that community. Decisions, therefore, should be made, not according to clinical interest, but from a public health point of view. Conditions which are simple to prevent and manage and common to many communities are included in primary eye care services. This is true, for example, for reading problems among the elderly, and seasonal conjunctivitis may well need equal attention. In general, the World Health Organization provides the guidelines given on page 19.13

Based on the WHO guidelines and available data, the model initiated in Thailand, which started primary eye care in 1981, integrated the following conditions into primary health care:

- Cataract (age-related/‘senile’ type)
- Trachoma and its late complications

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<tr>
<th>PHC PEC</th>
<th>Health education</th>
<th>Family planning &amp; MCH</th>
<th>Food &amp; nutrition</th>
<th>Safe water &amp; basic sanitation</th>
<th>Extended programme of immunisation</th>
<th>Essential drugs</th>
<th>Control of local endemic diseases</th>
<th>Care for mild ailments</th>
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Table 1: Primary Eye Care Integration Matrix

(*) In many instances, angle-closure glaucoma refers to the acute attack, with one eye already blind and prophylaxis required for the second eye.

(**) EPI staff are good health communicators, educators and gather community information.

(***) Diabetic retinopathy is common in some communities. This is the category 4 in the WHO categories of visual impairment.

(****) The cataract backlog might be regarded as an endemic disease in the given region, like tuberculosis, malaria and leprosy, etc. Trachoma, and its control is also relevant here. When the conditions are well controlled, they become part of a successful integrated health programme in that locality.

Discussion on the common eye diseases for community volunteers: mostly teachers, traditional healers and senior students. An ICEH slide set is being used. Vivekananda Mission Asram, West Bengal, India

Photo: Anup, New Stylo, Chaitanyapur
Primary Eye Care.

Table 2: Cataract Programme at Community Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Individual</th>
<th>Family</th>
<th>Community</th>
<th>1st level of contact (Health Centre)</th>
<th>1st level of referral (District Hospital)</th>
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</thead>
<tbody>
<tr>
<td>Input</td>
<td>Health education, posters, booklets, etc.</td>
<td>Health education, posters, booklets, etc.</td>
<td>Primary eye care course. Primary eye care kits, manual and guidelines, records and reporting systems.</td>
<td>Primary eye care course, minimum supplies and equipment, records and reporting systems.</td>
<td>Short, clinical training, minimum required supplies and equipment. Monitoring/supervision.</td>
</tr>
</tbody>
</table>

- Eye injuries
- Corneal ulcer
- Glaucoma, acute attack and cases with one blind eye
- Ophthalmia neonatorum
- Eye infections
- Pterygium*
- Refractive errors and reading difficulties
- Conditions with visual acuity less than 0.05<3/60**
  (* Highly prevalent in Thailand)
  (** Implies possible cases with disorders of the posterior segment of the eye, which may need referral)

Almost similar conditions were identified in Myanmar, then Burma, which also began primary eye care in 1981. Hence, all the above are essential elements in the clinical services of primary eye care in this part of the world. The same is also true for primary eye care in Vietnam, Laos and Cambodia, and even in China.

Other regions of the world have their own particular needs. For example, where onchocerciasis is highly prevalent, special action is needed in the primary eye care context.

Integration Matrix

Primary eye care should not be planned separately from primary health care. That is, primary eye care is regarded as an entry point, with primary health care, which goes to the heart of community. It is important to understand that primary health care is the mother system into which primary eye care, or basic eye care, is integrated. Careful situational analysis is, therefore, absolutely necessary for effective primary health care in the targeted community, with special attention to its essential elements.

The matrix given in Table 1 shows how integration can proceed on the premise that health care is established.

Cataract Programmes and Primary Eye Care

A cataract programme can be a good example of primary eye care working effectively within the framework of primary health care. The success of these programmes, within primary eye care, has been seen in many countries. Activities largely rely on community involvement, as in case finding and mass referral. The surgical eye team can play its role cost effectively, provided the community preparations are completed well in advance of actual surgery.

The activities start with a short training course for community health workers in the recognition of cataract, followed by door-to-door visits. Multi-stage screening is part of primary eye care in case finding, and encouraging patients to present for surgery. At the same time, information on eye care should be made available throughout the community by all known means. Possible community activities are summarised in Table 2.

References

3. See 1 above at 26.

INTERNATIONAL AGENCY FOR PREVENTION OF BLINDNESS AFRICAN REGION CONGRESS

15–18 September 1998

In co-operation with the Afro- Arab Society of Ophthalmology and the World Health Organization Collaborating Centre for the Prevention of Blindness, the IAPB Africa Region is hosting an Ophthalmological Congress in Lilongwe, Malawi. For further information contact:

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