Community Ophthalmology-Dimensions

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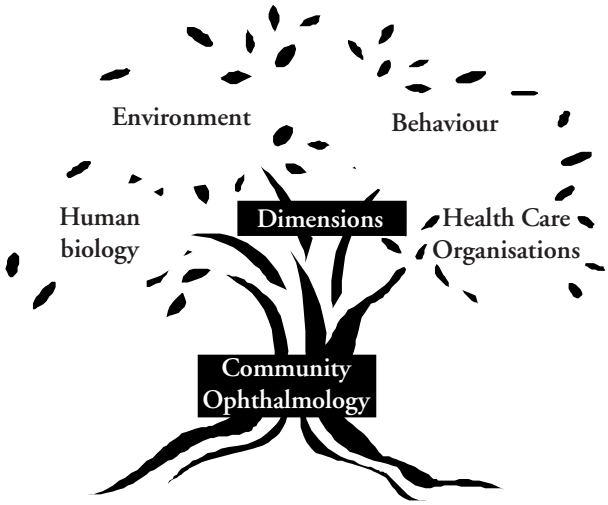
Abstract:

This article gives an overview about the concept of community ophthalmology and its application to the changing scenario in eye care services. It focuses on the shift from individualised care to community-based eye care services. The article also highlights the broad spectrum of conditions and circumstances that come in the purview of community ophthalmology and their importance in the current scenario.

Community ophthalmology is much more than simply ophthalmic practice in the hospital. It's rather a conceptual shift to improve the eye health status through preventive, promotive, curative and rehabilitative approaches thereby giving a holistic view of eye health. It can be envisaged as a health management approach of preventive eye diseases, to reduce the rates of eye morbidity and promote eye health by active community participation at the grassroots.

We often forget that eye disease do not exist in isolation. Ocular health is the end product of the in-

Dimensions of Community Ophthalmology



Distinction between clinical ophthalmology and community ophthalmology

Distinguishing factors	Clinical ophthalmology	Community ophthalmology
Goal	Treatment & Cure	• Treatment & Cure • Community participation • Preventive approach • Health education & Promotion • Community based rehabilitation • Epidemiological research
Target	Single patient	• Population or community as a whole
Diagnosis	Physical examination, Laboratory investigations, Tests	• Health survey of population • Screening camps
Therapy	Surgery/Medicine	• Surgery/Medicine • Health education • Counselling

Distinguishing factors	Clinical ophthalmology	Community ophthalmology
Base	Clinic based	• Clinic • Community based
Relationship	Doctor & Patient	• Doctor • Patient • Community volunteers • Social workers
Patient Mobilisation	Low	• High
Accessibility & Affordability	Not flexible	• Patient friendly
Research interest	Mostly clinical	• Clinical • Population based surveys • Community surveys
Drive	Provider driven	• Consumer driven/Community driven

teractions of the multi-factorial determinants of disease which exist in the community.

It attempts to unravel the role of diverse factors including biological factors like genetic influences and aging, environmental factors like sanitation and clean water supply, behavioural patterns like attitudes, life styles, religious beliefs and dogmas and the health care organisations on ocular health. It is felt that the occurrence and severity of ocular disease is a result of an interrelationship of these diverse factors.

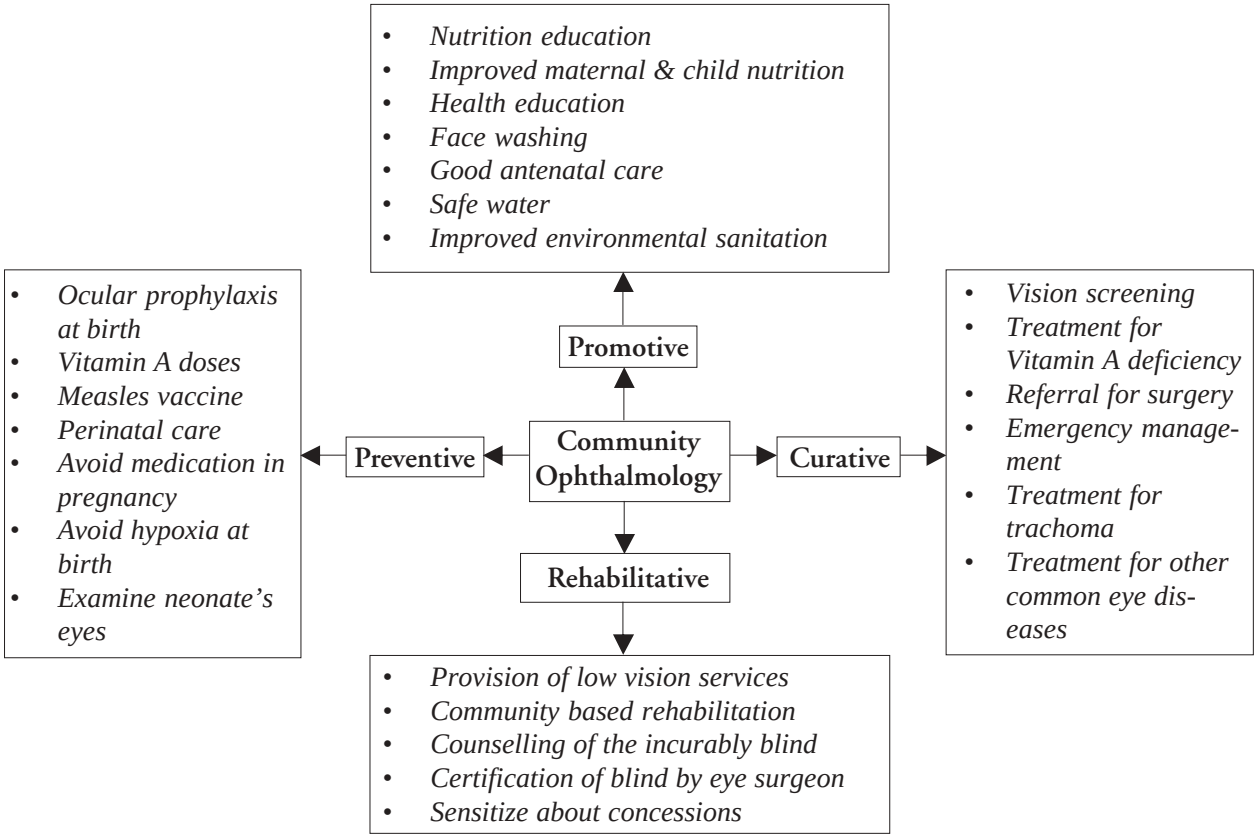
In reality community ophthalmology encompasses a broad spectrum of components which can supplement the eye care services as follows:

- Creating community awareness on eye health through various strategies
- Conducting epidemiological research and community based surveys
- Planning and management of sustainable eye care services
- Dissemination of information to eye care service providers and service users
- Social marketing of eye care services
- Improving the utilisation of eye care services
- Provision of comprehensive eye care services
- Integration of key components like Vitamin A, school screening, community based rehabilitation, primary eye care etc
- Training of primary eye care workers

As rightly said by Hans Limburg,

"Ophthalmology over the last decade has been largely characterised by its extensive use of high technology. More eye disorders can be diagnosed earlier and treated better than before. Nevertheless, one of the main problems in cataract blindness is that patients only report at a late stage, when they have lost their jobs already and become a burden on their family. Many patients do not come for surgery, because they have nobody to accompany them, because they are afraid, because they do not feel the need, because they do not feel where to go. High tech will not solve this, but health education can, creating more awareness can. Glaucoma cases, too often, report at a late stage. Earlier reporting through awareness campaigns can prevent people getting blind due to glaucoma."

Flow of various components



Relationship between community Ophthalmology and eye health status

Community Ophthalmology	Impact on Eye Health Status
Provision of safe water	• Reduced trachoma • Vitamin A deficiency
Environmental sanitation	• Reduced trachoma • Vitamin A deficiency
Eye health education	• Reduces prevalence of all diseases
Nutrition and food production	• Influences Vitamin A deficiency • Cataract • Diabetic Retinopathy
MCH and Family spacing	• Positive impact on Vitamin A deficiency
Immunisation	• Measles vaccine prevents Vitamin A blind
Control of communicable diseases	• Affects leprosy • Trachoma • Vitamin A deficiency • Congenitally acquired blindness
Control of locally endemic diseases like IDD	• Affects congenital blindness
Provision of essential drugs	• Affects leprosy • Vitamin A deficiency • Trachoma • Ocular injuries

In community medicine, we talk about five stages of prevention and control of a disease, which also holds good for community eye health. The five levels of prevention are:

1. Positive health promotion

In eye care it can be done through health education, environmental hygiene and healthy nutritional dietary practices.

2. Specific prevention of diseases

In eye care it can be through immunisation and Vitamin A supplementation in the childhood and to mothers while pregnancy and also through awareness for preventing the unhealthy practices during delivery.

3. Early diagnosis and treatment

In eye care it can be achieved through a screening system where cases like cataract can be diagnosed early and treated to prevent blindness at a later stage.

4. Disability control

In eye care it can be through monitoring of cases and treating them as in cases like glaucoma and diabetic treatment where, though a complete cure may not be given but the magnitude of disability can be controlled to a considerable extent. This also can be achieved by creating awareness through health education and ensuring maximum utilisation of the existing services. This can also be achieved through the low vision services.

5. Rehabilitation

In eye care it is for the absolute and irreversible blind cases who need social and economical support. The rehabilitation programme can support the wellbeing of a blind person by their *capacity building* in various facets of life so that they can live independently.

Community ophthalmology can also be instrumental in contributing to policy advocacy, wherein it will:

- Assess ocular needs of the population
- Prioritise the needs
- Inform the decision-makers for resource allocation
- Formulate preventive, promotive, curative programmes

In the global community as well, considerable amount of attention is not laid on community ophthalmology. This is evident by the fact that there exists only one journal of *Community Eye Health* in the international arena. A survey done by the journal showed an alarming finding that 60% of the respondents do not have access to any other source of up-to-date information on eye health. As for the other eye care journals, the community dimension of eye health is not much apparent as it should be. There is a desperate need to meet the requirements of health workers for relevant and accessible resource materials to support participatory community based teaching and learning.

Community ophthalmology or public eye health to be more precise, is emerging as one of the most challenging areas in eye care. Traditionally curative eye care focusing on cataract removal, has been the main focus in eye health sidelining the more essential factors that influence the epidemic of eye problems. The profoundly changing scenario in terms of *increased life span, changes in life style, environmental degradation*, has a tremendous impact on eye health and exceeds much beyond the curative aspect. In the recent times the eye care delivery systems have taken a new twist, which tries to look at the problem in a broader perspective.

There are 15 million blind in India, majority of whom reside in rural and remote areas. Around 80-90% of the blindness is completely avoidable in an effective manner. To establish a community based eye care delivery system there needs to be a concentrated deliberation for *easy accessibility, effortless affordability and absolute availability* of services in the community by the providers.

In a country like India, that is housing a burgeoning second largest population of the world, does not have much adequate infrastructure in terms of trained workforce in community ophthalmology. As of today three centers namely *R P Center-AIIMS, Delhi, L V Prasad, Hyderabad,* and *LAICO-Aravind Eye Hospital, Madurai*, are considered as professional agencies that renders community ophthalmology services in some form or the other and are in the process of developing a separate wing for it. It is significant here to note that, this is highly insufficient for a country with such a magnitude of eye related problems. Even in the 150 odd medical colleges spread all over India little importance is given to community ophthalmology and the entire training is based on clinical treatment.

The community also needs to be actively involved in the design, implementation and assessment of eye health services leading to their continuing improvement. The community also needs to be actively involved in deciding the staffing and training for the primary health care systems and mobilisation of local resources that can strengthen and make the most of primary health care provisions. *Community participation* in ophthalmology envisages the involvement of Health functionaries, Non-governmental organisations (NGO), Teachers, Social workers, Voluntary/Charitable Organisations, Opinion leaders and Local practitioners of different systems of medicine.

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3. *Hans Limburg, Monitoring and evaluation of intervention programmes for cataract and for refractive errors in India, 1999.*
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Letter from a participant of Community Outreach Training programme

Dear Sir, Date: 13-02-2001

Namaskar from nepal.

Sir many many thanks to you for teaching me so many ideas about outreach programme. You know sir, from this month February 2001, I am planning to a one day camp and a school screening camp every week in our place. I hope it will be successful because I get lot of help from you in the present and future. If I have any problem I will ask you, hope so you will help me. You know sir when I came back to my place, first I spoke with our project chief about this outreach programme how it will benifit to our hospital and will increase our activities. Also I explained about the magnitude of blindness in our area. I hope our official staffs will also help for this. I believe I will increase this programme. I will end up with this for now. I will send the monthly report from February 2001. If you have any suggestions please write to me and share new ideas because you are my teacher.
Thank you very much for your kindly help when I was in your place. Tell all of LAICO staffs, especially Mrs. Preethi and Ms. Shasi, namaskar from shyam.

Your sincerely

Shyam Shrestha
Lions Eye Care Centre
Kathmandu.