HEALTH SYSTEMS

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THIS CHAPTER WILL INCLUDE A REVIEW OF:

- The district health system
- Defining the role of different cadres

THE DISTRICT HEALTH SYSTEM

The district health system has been identified as the appropriate building block for a national health system by the WHO.

It is a model that is promoted as a solution to creating access to health care at a local level, distributing services to different levels of the health care system and facilitating the appropriate referral pathways. While many countries have adopted the district health system as a model often the provision of eyecare within this system is ill defined. A greater inadequacy is the absence of a role of optometry within such a model.

The district health system is crucial to the delivery of primary health care.

CHARACTERISTICS OF DISTRICT HEALTH SYSTEM

- A number of discrete geographical sub-divisions, usually called health districts, each with a clearly defined catchment population

  "A district health system based on primary health care is a more or less self contained segment of the national health system. It comprises first and foremost a well defined population, living within a clearly delineated administrative and geographic area, whether urban or rural. It Includes all institutions and individuals providing health care in the district, whether governmental social security, non-governmental, private or traditional. A district health system therefore consists of a large variety of interrelated elements that contribute to health in homes, schools, work-places and communities, through the health and other related sectors. Furthermore it includes self-care and all health care workers and facilities, up to and including the hospital at the first referral level and the appropriate laboratory, other diagnostic and logistic support services"
  (World Health Organisation, 1988)

  Clear guidelines are used for demarcation of the health districts such as:

  - Each to include a hospital
  - Population not to exceed 500 000 to 1000 000

THE DISTRICT HEALTH SYSTEM(CONT.)

- Geographical size to be such that the furthest clinic can be reached in approximately 3 hours from the district office
- Each health district has a decentralised health management team responsible for:
  - Delivery
  - Planning
  - Managing
  - Implementing and monitoring
  - Ensuring equitable and cost effective use of resources and
  - Establishing an appropriate referral system

There is a need for comprehensive programs to ensure that the various cadres of eyecare are integrated into a seamless unit of service and referral within the district health system. The fact that optometrists are often not employed in the public sector has compounded the matter as the role of optometrists is often not clearly defined within the district health system.

SERVICE DELIVERY IN THE DISTRICT HEALTH SYSTEM

The objective of the district health system is to streamline delivery and avoid unnecessary duplication. The biggest challenges confronting eyecare care services are the apportioning of responsibilities within the district health system.

Barriers to effective human resource utilisation

- Inter-professional jealousies: competition between optometry and ophthalmology and possibly between the various cadres of eye health professionals, especially considering the ever expanding scope of practice within each cadre
- Limited resources: no funds for the appointment of the appropriate human resources
- Lack of adequately trained professionals: poor outputs from training institutions, lack of training institutions as well as emigration and loss to other professions impact on the availability of adequately trained professionals

Components of the District Health System

In order for eye care and blindness prevention programmes to be successful integration into existing district health care models is a necessity. There is therefore a need to plan programs within the context of the district health system.

Much of eye care delivery within the health district framework is characterized by the following weaknesses:

- Centralisation of services in urban centres;
- Under-resourced smaller hospitals and clinics;
- Lack of trained personnel;
- Lack of consumables and infrastructure;

Primary Health Care clinics

These clinics provide a range of primary health care services with eye care often being a neglected component. The personnel at this level of the health care system are expected to be multi-skilled with eye care skills being one of their range of skills. The eye care personnel are usually primary health care nurses who have completed a course in eye care.

Vision screening and treatment of basic acute eye conditions such as conjunctivitis, is the main role of eye care personnel at this level. In addition they should be able to engage in health promotion activities by developing eye health education tools and communicating these messages to the community the clinic serves.

District health clinic

Primarily responsible for primary health care services and serves or receives referral from a number of primary health care clinics. These clinics are generally staffed by primary health care nurses with medical doctors on a permanent or part time basis depending on the number of people in the catchment area or remoteness of the clinics. Furthermore ophthalmic nurses (ON), ophthalmic clinical officers (OCO) and/or ophthalmic medical assistants (OMA) are deployed in some countries to these clinics.

THE DISTRICT HEALTH SYSTEM (CONT.)

District Hospital

Secondary level of care is provided in these hospitals. These hospitals serve a number of health districts, which refer patients to them. Ocular disease diagnosis and management, refraction and low vision are usually provided at this level. The district hospitals can be staffed by ophthalmologists, optometrists, ON, OCO, OMA.

REGIONAL HOSPITAL

- Secondary and tertiary level of eye care is provided at these hospitals, which are often the referral site for a group of district hospitals
- Eyecare staff may include ON, OCO, OMA, optometrists and ophthalmologists

PROVINCIAL HOSPITAL

- Tertiary and quaternary care is provided at this level. Serves a few regional hospitals which refer cases that cannot be managed at a regional level
- Eyecare staff may include ophthalmologists, optometrists and ON

DEFINING THE ROLE OF DIFFERENT CADRES

It is critical that there be a clear definition of roles within the health district. Duplication should be avoided and a clearly defined referral system should be developed as in a climate of limited resources and overworked staff, duplication is illogical and wasteful.

There are various participants of the eye care teams. The following are the possible roles that the different personnel play within health districts. These roles can vary across districts and are often not consistent, in the sense that their job descriptions could change periodically depending on resources and challenges at the district level:

COMMUNITY HEALTH WORKERS

The key roles for community health workers are usually screening, case finding, health promotion and health education. Key tasks for eye care include case finding and/or screening for ocular disease and refractive errors. While the primary health care nurse is well trained and ideal for ocular health and vision, case finding and/or screening, outreach from clinics is usually very difficult due to the plethora of tasks and patient numbers at this level. The community health workers therefore constitute an ideal cadre for community based eye care activity. They can be particularly useful in health promotion activity. This is necessary in rural areas in particular due to the high usage of alternative approaches to managing eye diseases e.g. urine being used as a treatment for conjunctivitis resulting in patients presenting at clinics with gonococcal conjunctivitis (Naidoo K 2006, pers. comm).

PRIMARY HEALTH CARE NURSE (PHCN)

The Primary Health Care Nurse is based at the primary health care clinic. The primary health care nurse is primarily responsible for case finding and for the basic therapeutic management of a broad range of diseases. Eye care is but one of the many tasks that they engage in. In terms of eye care they usually screen for eye diseases and visual loss and refer to the nearest clinic. However, they could also be responsible for the prescribing of presbyopic glasses after having ruled out the presence of any potentially blinding disease.Given the lack of knowledge about eye care their tasks can also include liaising with local community structures to promote eye care activities and uptake of the clinical services. The PHCN should address community groups and schools regarding the promotive and preventive approaches to eye care. An example is the alarming number of diabetic and hypertensive patients who are never informed about the impact of these systemic diseases on their eyes, usually due to the hectic schedule of clinicians who diagnose these patients. This leads to diabetic and hypertensive patients only seeking eye care services when visual loss has occurred. Such patients can benefit tremendously from preventive and promotive efforts.

DEFINING THE ROLE OF DIFFERENT CADRES(CONT.)

OPHTHALMIC NURSE (ON) / OPHTHALMIC MEDICAL ASSISTANT (OMA) / OPHTHALMIC CLINICAL OFFICER (OCO)

ONs / OMAs / OCOs are mainly allocated to the district hospital but can also be deployed at the district clinic. In many health districts the ophthalmic nurses are the foundation of the eye care system as optometrists and ophthalmologists are unavailable. The ophthalmic nurses manage all ocular disease as well as conduct refractions in instances where they have been provided with the additional training.

OPTOMETRISTS

Optometrists at the district hospital level are a very valuable resource in providing ocular disease management and refractive services. However the current limited number of posts as well as the unavailability of optometrists for the public sector often prevents these appointments from occurring. Given the current remuneration scales for optometry and the lack of posts in many countries insufficient number of optometrists are mobilised to take on positions at district hospitals. The role of the optometrist at a district hospital level in such circumstances should therefore be one of a visiting clinician to provide support for the ophthalmic nurse in the form of training and mentoring and managing complex cases.

The optometrist's primary location in such circumstances will be at the regional hospital level handling referrals from different district hospitals. At this level the optometrist should provide refraction services, low vision services and ocular disease diagnosis and co-management/management.

OPHTHALMOLOGIST

Ophthalmologists provide treatment and management of ocular disease, and surgical care. The lack of ophthalmologists as well as the attractiveness of the private sector makes it difficult to deploy ophthalmologists to district hospitals. They are therefore usually located at regional hospitals or large district hospitals.

In order to significantly impact on the cataract surgical rates in the developing world it is necessary to increase the role of the ophthalmic nurses and optometrists in disease management and co-management of post surgical patients.

DISTRICT HEALTH MANAGER

The district manager is an integral component of the human resource team of the district. A supportive manager can enable enormous developments in terms of eye care, as the allocation of resources in the public sector is usually centrally controlled. The decentralisation of tasks to the district managers from the provincial government level creates an opportunity for greater success with district level planning.

THE TEAM APPROACH

The public health system is often under-utilized due to the lack of a team effort in the delivery of health care services. The different personnel work independently and are often engaging in a duplication of tasks. Territorial approaches by professionals are quite common with a "my role" mentality predominating rather than an "us" mentality (Croasdale A 2006, pers. comm).In order to effectively generate cooperation team training in the form of clinical and planning workshops are important. Further there is also a lack of integration between the eye care personnel and other departments. This hinders the effective management of patients e.g. diabetic patients should be co-managed between the physician and the eye care personnel.

DEFINING THE ROLE OF DIFFERENT CADRES (CONT.)

CIVIL SOCIETY INTERVENTIONS

The LV Prasad Eye Institute (LVPEI) in India has developed an innovative model for the delivery of eye care in the developing world (Fig. 2-1), which has been implemented very successfully (Rao, 2005).

In this pyramid model, basic eye care screening is done by “Vision Guardians” at the village level, at a ratio of 1:5,000.“Vision Technicians” in Vision Centres at the community level provide primary eye care (1:50,000), while advanced tertiary care takes place at the Centre of Excellence level (1:50 million).Tasks are thus divided amongst the available workforce, so that the relatively few individuals capable of high-end tasks are freed to deliver those.

Local communities should always be involved in the establishment of eye care services, and educated about eye care – since available facilities are not always accessed spontaneously.The WHO recommends that the minimum target for mid-level eye care personnel be 1:50,000 populations.

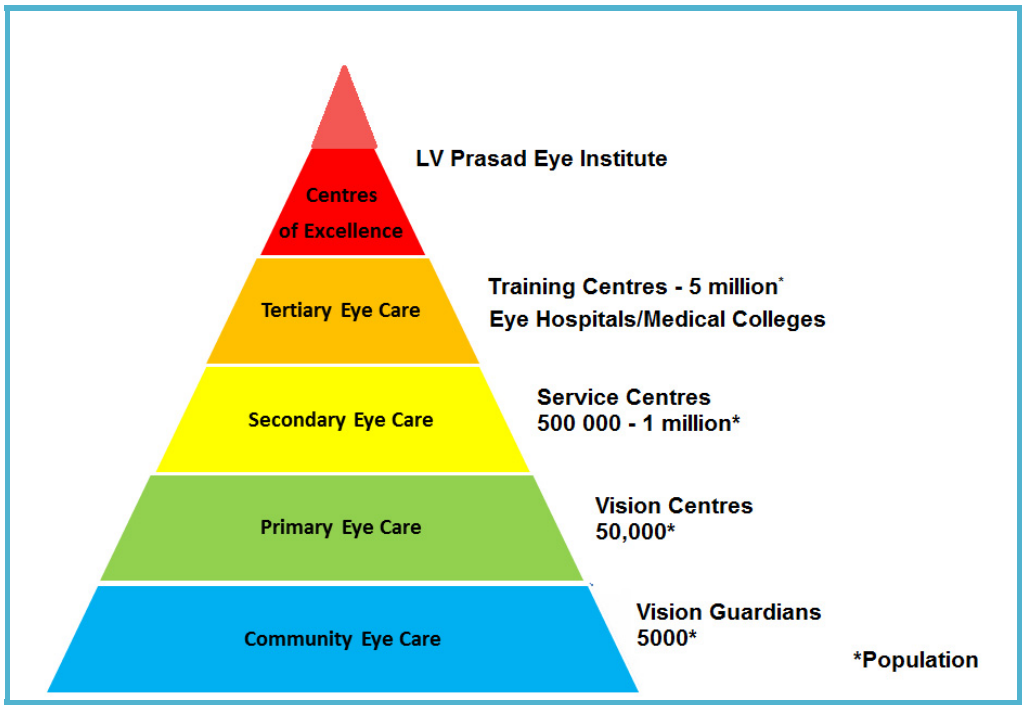

Figure 2-1: *The LVPEI model for Eye Care Service Delivery*
Source: *Rao, 2005: An infrastructure model for the implementation of VISION 2020: The Right to Sight*

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