



Vision Center in China

He Eye Hospital, Shenyang, China

Global Consultation on Reaching the Unreached

October 8, 2007---LAICO, Madurai

Country profile

- Middle income country in 2006
 - GDP: 20.9407 trillion yuan (US\$2.7 trillion)
 - Per-capita :
 - 11,759 yuan in urban resident
 - 3,587 yuan in rural residents
 - \$2043 in all residents
 - Population:
 - 1.31 billion
 - 18% of the people >50 years old,
 - 120 millions over the age of 60 years.
 - Area: 9,600,000 square Km
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Primary Health Care Infrastructure

- ❑ County Hospitals: over 2,400
 - ❑ Township Hospitals: over 50,00
 - ❑ Village Health Stations: over 75,000
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Ophthalmic Resources

- ❑ eye doctors: 22,000
 - ❑ Eye care units (clinic and hospital): 4000
 - Over 3300 can do cataract surgery
 - ❑ Cataract surgeons: more than 10,000
 - ❑ 400 county hospitals:
 - No eye doctors have the capacity for doing cataract surgery
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Magnitude of Visual Impairment

- According to latest data from the Second China National Sample Survey on Disability (2006-2007)
 - 12.33 million in 2006 vs 7.55million in 1987
 - VI: Best corrected vision in better eye less than 6/18
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Major Disease caused VI in 2006

- Cataract 56.7% --7 millions (0.54% in all age groups vs 5.8% in age over 60)
 - Fundus diseases 14.1% ---1.74 millions
 - Cornea diseases 10.3% -----
1.27millions
 - Refractive error (7.2% -----0.88million
 - Glaucoma 6.6%)-----0.81 million
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The priority of eye diseases in different age groups

	1	2	3	4	5
Preschool (3-5 yrs)	Refractive Error	amblyopia	strabismus	Retinal disorders	Ocular trauma
Primary school(6-12 yrs)	Refractive error	Ocular trauma	amblyopia	Retinal disorders	Strabismus
Middle and high school(13-17 yrs)	Refractive error	Ocular trauma	Conjunctivitis & keratitis	Juvenile glaucoma	Uveitis
University/college (18-22 yrs)	Refractive error	Conjunctivitis & keratitis	Myopic macular disease	Juvenile glaucoma	Uveitis
age >40 yrs	Glaucoma	DR	Ocular trauma	Cataract	CRVO
Elderly(>65 yrs)	cataract	glaucoma	DR	ARMD	CRVO

Current trends

- ❑ Refractive error (age 3-22 yrs)
 - ❑ Diabetic retinopathy (age over 40 yrs)
 - ❑ Glaucoma (age over 40 yrs)
 - ❑ Cataract (age over 65 yrs)
 - Trachoma is not problem in China now.
 - Refractive error is becoming main VI caused disease in young population.
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Challenge- Health care system in China

Previously

- 1) Centrally planned but locally Managed welfare approach
- 2) Government – owned provider
- 3) Medicare free based
- 4) Poor are more protected

Currently

- 1) Centrally planned and free - market approach
- 2) More private involvement
- 3) Individual out-of-pocket and insurance based
- 4) Poor are less protected

Health care system reform since 1990s was failed announced by the state government in 2005, new policy is becoming soon

Barriers

- ❑ Uneven ophthalmic resources and inequity in service provision :
 - 80% eye doctors in urban area; 80% eye patients in rural area, few of services in rural areas with greatest need
 - 400 county hospital do not have cataract surgery service
 - Lack of social support system in poor and marginalized populations
 - ❑ Patients with VI increase with aging population, but do **not have effective primary eye care system**.
 - ❑ Lack awareness of eye care
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Barriers

□ Economic/financial barriers:

- Poor people in the rural area do not afford to visit eye clinic in cities
- Eye care service in cities is expensive to poor people without insurances



Barriers--Accessibility

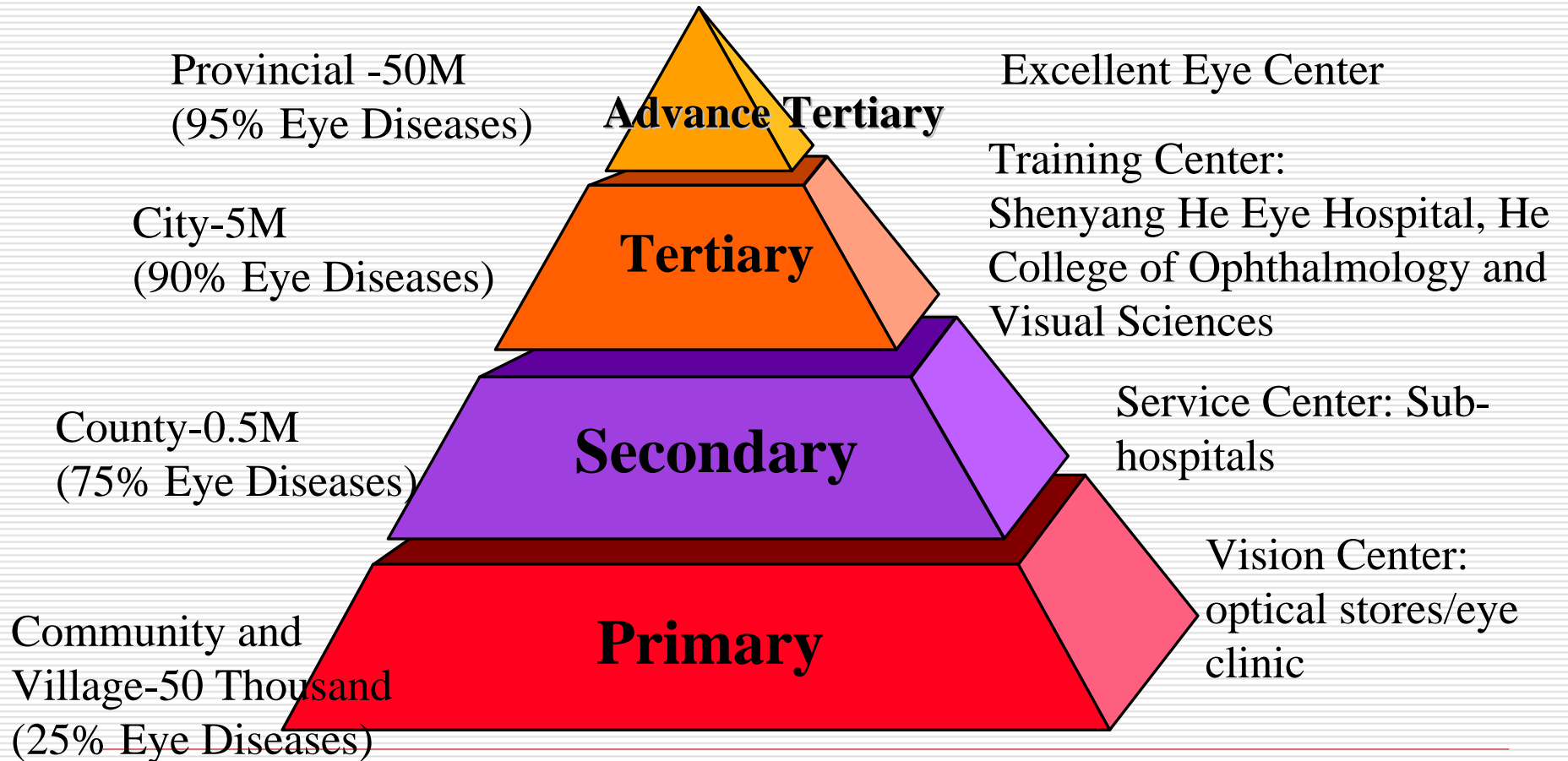
- ❑ No permanent primary eye care facility
- ❑ Poor doctor/patient relationship: tense, do not trust each other.
- ❑ Lack of communication
- ❑ Long distance
- ❑ Multiple visits are difficult for the elder in the rural area



How to overcome barriers

- The Concept of vision center (VC):
 - based on four tier pyramid model to provide eye care for the needy population
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Vision2020 Pyramid and He Eye Care System



Training center

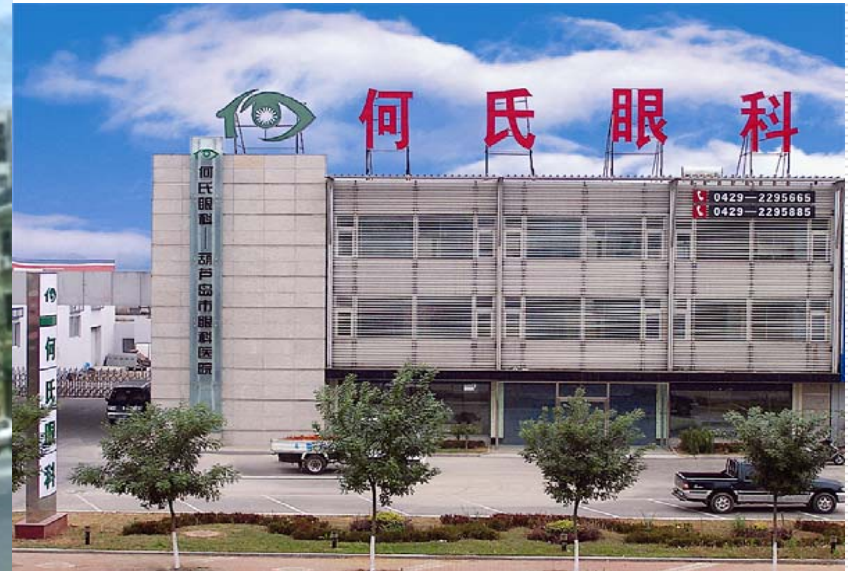


He College of Ophthalmology and Visual Sciences





Service centers



Operation Theater





基础检查

BASIC EXAM

Equipments for basic eye examination in OPD



Bio-tech corp. and research center





The important role of VC in He Eye Care system

- ❑ The Vision center is permanent primary eye care site, and usually cover 50 thousand population.
 - ❑ The vision center currently is the complement to outreach screening and will be a substitute of outreach camps in the future.
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The model of Vision center-1

Primary level:

■ City—Optical shop

Equipment Trial sets Autorefractor slit-lamp

Eye disease: RE cataract ocular surface disease

■ Town/village—township hospital

After trained in He eye hospital, family doctors can use the appropriated techniques to screening cataract, ocular surface disease, and know how to do refractive examination

The model of Vision center-2

- Secondary level City : Eye clinic/ optical shop
 - Refractive exam, strabismus and amblyopia, low vision rehabilitation, ocular surface diseases , glaucoma, DR
 - Equipment
 - Slit Lamp
 - Retinoscope
 - Direct Ophthalmoscope
 - Trial sets
 - Autorefractor
 - Tonometer
 - computer and internet connectivity
 - Low vision aids
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Aims of Developing Vision Centers in the Eye Care System

- ❑ Increase number of people served
 - ❑ Access to poor people in communities and villages
 - ❑ Provision for rural people
 - ❑ Use and availability of equipment and materials in communities and villages
 - ❑ Development and support from *within* the community and the village
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Existing VCs in He Eye System

- He Eye Care System has 40 optical shops, 35 in Shenyang city.
 - Each optical shop is well equipped with
 - Slit Lamp
 - Retinoscope
 - Trial sets
 - Autorefractor
 - computer and internet connectivity
 - 4 optical shops also have other equipments
 - Direct Ophthalmoscope
 - Tonometer
 - Low vision aids (only 2 shops)
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Distribution of VCs in Shenyang City





VC functions of He eye eye system

- Early Intervention --Early detection and assessment
 - Health promotion - awareness of common eye diseases
 - Screening and referral
 - Low vision Rehabilitation in certain VCs
 - Follow-up of post-operation patients
 - Treatment VI caused by RE by glasses
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Low vision aids

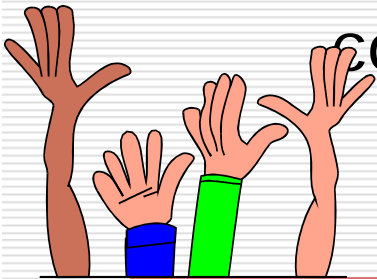






Who can help to build VC

- Supports from government and NGOs
 - CMB has approved a five-year plan to support He Eye Hospital to establish 8 VCs in township hospitals in Liaoning province from 2008.
 - Local health bureaus and CDPF could contribute for developing township VCs.



**VOLUNTEERS
NEEDED**

Benefits from building VC as permanent primary eye care facility

- 1. Accessible for all :
 - Equity
 - 2. Efficiency:
 - appropriate use of technology (e.g. Slit lamp, visual chart, trial lens set)
 - 3. Quality
 - Inexpensive
 - Good doctor –patient relationship
 - Integrated care (preventive +promotion +referral)
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Thank You



He EYE HOSPITAL

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