EYE CARE PROGRAM IN INDONESIA

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Background

- Indonesia: 240 Million population, 32 provinces, 440 districts
- Geographically difficult
- Decentralization policy, MOH could not control
- Lack of human resources, 1000 eye specialists
- High and complicated eye problems
- Eye care is not high priority in national health system
- Not yet high political will

HEALTH INFRASTRUCTURE

MIN. OF INT.AFFAIR

DG

MINISTRY OF HEALTH / MOH

DG. MED.CARE

DG. PUBLIC HEALTH

25 PROVINCES (5-40 M pop.)

TEC HOSPITALS

HEALTH OFFICE

400 DISTRICTS (2-4 M pop.)

SEC HOSPITALS

HEALTH OFFICE

SUBDISTRICT (30.000 pop)

PRIMARY HC(7000)

Networking of HED

PROJECT OF EXCELLENCE

PROVINCIAL COMMITTEE

NATIONAL COMMITTEE

PHC Centre

HOSPITAL

CLASS A

CLASS B

CLASS C

District Mayor

District Hospital

PHC Head

EYE CARE SERVICES

<table>
<thead>
<tr>
<th>PRIMARY EYE CARE</th>
<th>SECONDARY EYE CARE</th>
<th>TERTIARY EYE CARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVOCACY</td>
<td>TRAINING</td>
<td>MICROSURGERY</td>
</tr>
<tr>
<td>PROMOTION</td>
<td>SURGERY</td>
<td>TRAINING</td>
</tr>
<tr>
<td>SCREENING</td>
<td></td>
<td>MASS AND OUTREACH</td>
</tr>
<tr>
<td>REFERRAL</td>
<td></td>
<td>SURGERY</td>
</tr>
<tr>
<td>FOLLOW UP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NETWORK:

- GOVERNMENT
- Prof. Organization
- Non Government Org
- Business Enterprise
- Others Related Org
Blind and visual impairment

NATIONAL EYE SURVEY 1996
- All age group
- N= 23150
- Blind: 1.5%
- Cataract blind: 52%
- Visual impairment: 1.1% and 1.8%
- Refractive error: 22.1%
- Cataract: 7.3%
- Pterygium: 13.9%
- Child blind: 0.3%

WEST JAVA EYE SURVEY 2006
- 40 years up
- N= 4200
- Blind: 3.6%
- Cataract: 52%
- 7.8% and 7.0%
- 58%
- 22.8%
- 12.0%

- All age group
- N= 23150
- Blind: 1.5%
- Cataract blind: 52%
- Visual impairment: 1.1% and 1.8%
- Refractive error: 22.1%
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- Pterygium: 13.9%
- Child blind: 0.3%

PBL National Strategic Planning

- National committee of PBL
- Advocacy and communication
- Partnership
- Infrastructure and eye care management
- Capacity building
- Resources Mobilization

PBL, operational policy

- Part of Healthy Indonesia 2010 and V 2020
- Integrated in national health system
- Oriented to qualified human resources
- Participative, coordinative, affordable
- Cross sector and cross program
- Community based services

GOVERNMENT

- Dissemination information, Vision 2020, MOH
- NATIONAL PBL STRATEGIC PLANNING
- NATIONAL PBL COMMITTEE BOARD
- TRAINING MATERIAL Eye Care Management
- DEVELOP, REVIEW AND REVITALIZED OF EYE INFRASTRUCTURE (Decentralization)
- EMPOWER HEALTHY EYE DISTRICT
- World Sight Day, MOH AND PERDAMI

PERDAMI
(Indonesia Ophthalmologists Association)

Attended and conducted Vision 2020 Workshop
Included community ophthalmology curriculum
Included community ophthalmology division
Recommended to celebrate WSD to all members
Involved in national eye health program
Involved in national PBL strategic planning
Involved in national PBL committee board
Awarded member for community work
National Eye program

- Advocacy of PBL strategic plan to 8 provinces
- Develop PBL Committee in 8 provinces
- Develop module training for eye care program
- Develop training for eye care program managers from 8 provinces

To solve the problem?

- Advocacy
- Human resource development
- Infrastructure development
- Disease intervention
- Partnership

Vision 2020, the right to sight

Developing an action plan at provincial and district levels

District level, small scale, more success

The Goal

To assist the districts to develop the sustainable model of eye health care to provide the quality, equity, accessible, affordable services for community

Implementation in Healthy Eye District Concept
Strategy

- Advocacy
- Human Resource Development
- Partnership
- Disease Intervention

Specific Priority Program

- Cataract blind
- Refractive errors
- Children blindness
- Eye health promotion

Integrated Eye Health Program

- School screening through existing school program
- Children screening through primary health center/ PHC existing program
- Cataract blind screening through community groups and PHC

I SEE

- Integrated: existing health services
- Sustainable: need to be ongoing and long-term
- Equitable: available to all sectors
- Excellence: good quality

4 districts, 10 million pop.
West Java Province
Role of Teaching Hospital/TEC

- Training center
- Resource center
- Referral center

Year 2004-2008

- Cicendo Eye Hospital support and supervised 4 districts in West Java to implement healthy eye districts
- Bandung (city and district), Subang, and Garut district
- Funded by LCIF, CBM and local budget as counter budget

Advocacy

- Local Government, Province and District
- Professional and community associations
- University/Medical Faculty
- Health infrastructure (PEC, SEC, TEC)
- Partners, NGOs, Health Insurance
- Other Departments, Education, Internal Affair

Advocacy to parliament member by MOH and IOA
Advocacy to Mayor Bandung City National Health Day, November 14th 2006

The major launched:
- No blind people in Bandung City
- War to Blind

Human Resource Development

CAPACITY BUILDING
Cicendo Eye Hospital to strengthen the role of TEC

- Pediatric ophthalmology fellows, LVPEI 2002/2005
- Eye care management course, LAICO 2002/3
- M.Sc Comm.Ophth., ICEH-PICO 2003/4
- Low vision Training, HONGKONG 2004
- Paramedical, non medical training 2002/4
- Vitreoretina, Glaucoma, Ant segment 2005

2002 - 2007

MANUAL SICS TRAINING,
2004 in Bandung 2008 in Makassar

Every Year by local Faculty
Aims & Objective of the Project

- To eliminate avoidable blindness in children through the establishment of comprehensive pediatric eye care as a part of the National Health System

CBM project

- Cataract blind, mass cataract surgeries
- Children blind, treatment and surgeries
- HRD: MLOP, cataract surgeon, teachers and cadres training
- Workshop and seminars for eye care program
Helen Keller International

- Cataract blind
- RACSS, rapid assessment of cataract surgery services
- Vitamin A program
- Refractive error for children
- Eye health survey, West Java 2006
- Diabetic retinopathy, community based survey in progress proposal

Local partners

- Health Insurance
- Local government
- Religion based community, Darut Tauhid
- Social based community, Dharmais, OBI
- others

DISEASE INTERVENTION

1. CATARACT BLIND

- Prevalence rate: 0.78 %
- Cataract Surgical Rate: 350 to 500-750
- Blind Reduction Rate: < 75% to >75%
- Need community awareness / participation
- Need training for eye care management

Target and Indicator

- (1) Cataract Blind
  Output: 1% population per year
  Outcome: - 85% with VA > 6/12
  - 90 % with IOL
  - Affordable, sustainable, integrated
  - Free and cross subsidy for the poor
**Cataract Surgical Rate**
No. of Cataract Surgeries per Million pop./ Year

<table>
<thead>
<tr>
<th>Surgical Rate (per 1000)</th>
<th>Cataract Rate</th>
<th>IOL Rate</th>
<th>VA Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 125</td>
<td>450</td>
<td>75</td>
<td>&gt;85</td>
</tr>
<tr>
<td>125-249</td>
<td>2000</td>
<td>90</td>
<td>&gt;85</td>
</tr>
<tr>
<td>250-499</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500-999</td>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000-1999</td>
<td>3000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000-2999</td>
<td>4000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000-3999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4000+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Targets and Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataract surgical rate</td>
<td>450</td>
</tr>
<tr>
<td>Current</td>
<td>2000</td>
</tr>
<tr>
<td>Target rate</td>
<td>90</td>
</tr>
<tr>
<td>IOL rate (%)</td>
<td>75</td>
</tr>
<tr>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>Target rate</td>
<td></td>
</tr>
<tr>
<td>VA target (6/12) or better (%)</td>
<td>&gt;85</td>
</tr>
</tbody>
</table>

> Mass Cataract surgery, community based

> Mass Cataract surgery, hospital based
**Blind reduction rate target and indicators**

<table>
<thead>
<tr>
<th>Year</th>
<th>Available correction</th>
<th>Good</th>
<th>Borderline</th>
<th>Poor</th>
<th>BRR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2003</td>
<td>55%</td>
<td>20%</td>
<td>&lt;25%</td>
<td>87.5</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>58%</td>
<td>31%</td>
<td>11%</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>70%</td>
<td>18%</td>
<td>12%</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>70%</td>
<td>20%</td>
<td>10%</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>75%</td>
<td>18%</td>
<td>7%</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>

**2. REFRACTIVE ERROR**

- Training teachers from elementary school
- Screening by trained teachers
- Providing correction and glasses by team
- Coverage from 12.5% to 25% of school age
- Providing glasses is still a problem

**(2) Refractive error**

- Output: All elementary student screened
- Outcome: All students have the spectacle needed
- Integrated in the system
- Affordable, sustainable
- Providing affordable spectacle for the poor

**Teachers training, a strategy to eliminate refractive errors in children**

**The Cicendo Eye Hospital, Bandung**

conducting courses / workshops to increase the knowledge of parents and teachers to involve the community participation
TEACHERS TRAINING, ELEMENTARY SCHOOL

CORRECTION FOR REFRACTIVE ERROR

Teachers trained (2002 - 2004)
Funded by CBM

<table>
<thead>
<tr>
<th>District / City</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Subang district</td>
<td>150</td>
</tr>
<tr>
<td>2 Garut district</td>
<td>205</td>
</tr>
<tr>
<td>3 Tasikmalaya district</td>
<td>100</td>
</tr>
<tr>
<td>4 Cianjur district</td>
<td>150</td>
</tr>
<tr>
<td>5 Bandung district</td>
<td>220</td>
</tr>
<tr>
<td>6 Bandung city</td>
<td>200</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1025</strong></td>
</tr>
</tbody>
</table>
3. CHILDREN BLIND

Funded by LEF, CBM, HKI

- Promotion to community and key person
- Training for District Team as SEC
- Surgery at TEC for congenital cataract and glaucoma, squint, tumor, ROP
- Pediatric team consists of multi-discipline
- Rapid assessment to find the cause of blind

(3) Children blindness

- Output: - Screening children age group
- Outcome: - Decrease children blind
- Interdisciplinary collaboration
- Partnership with NGOs
- In the system, affordable, sustainable

Elimination of Avoidable Childhood Blindness Program
Cicendo Eye Hospital
2004 - 2008
promotion activity by CEH

Children Drawing Contest 2004
Free Eye Examination 2004
Childhood Blindness Training 2005

To strengthen PEC

- Increase the awareness and knowledge about preventive aspects of childhood eye diseases among the health staff in all Health Centers
- Increase the basic knowledge in identifying the common eye diseases and treat/refer to GP’s, nurses, teachers, voluntary workers

To strengthen SEC/TEC

- Increase the awareness, skill, and knowledge of the health personnel
- Provide the required equipment
- Train appropriate personnel in the diagnosis and management of the priority problems identified for cataract, glaucoma and ROP

One Day Seminar
Prevention of Childhood Blindness 2006

Diseases pattern OPD in Jan - June 2005

<table>
<thead>
<tr>
<th>Category</th>
<th>Jan - June 2005</th>
<th>July - Dec 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refraction</td>
<td>39%</td>
<td>41%</td>
</tr>
<tr>
<td>Allergic</td>
<td>18%</td>
<td>14%</td>
</tr>
<tr>
<td>Tumor</td>
<td>12%</td>
<td>3%</td>
</tr>
<tr>
<td>Cataract</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Trauma</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>A/Pseudo</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>BDD</td>
<td>18%</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>ODNL</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Cataract 37%
Other 63%
Cataract 58%
Tumor 20%
Trauma 11%
Plastic 8%
Orb. trauma 3%
Cataract 49%
Tumor 16%
Trauma 13%
Plastic 22%
Glau 6%
Type of surgery in July – Dec 2005
Cataract 38%
Tumor 16%
Trauma 13%
Plastic 22%
Glau 6%

Eye Health Promotion
- Community eye health problem
- Community awareness and demand
- Training and seminars for community
- Modules, brochures, leaflet, flyer

Communication, Information, and Education

LOW VISION
- Just started at Cicendo Eye Hospital
- Facilitated and funded by WHO/LCIF/CBM
- Training human resources
- Collaborating with school for blind
Training & seminar

- Seminar for community in 2004
- Seminar for Refractionists 2005
- Seminar for teachers, in 2005
- Continuing and refreshing lecture, 2005 - 2006 by Karin van Dijk

VISION 2020 PERSPECTIVE, INDONESIA
VISION 2020 LAUNCH

- LAUNCHED BY VICE PRESIDENT, JAKARTA, FEBRUARY 2000
- FACILITATED BY WHO SEARO, DELHI
- ATTENDED BY SOUTH EAST ASIAN COUNTRIES PARTICIPANTS
- FOLLOWED BY WORKSHOP TO DISSEMINATE INFORMATION FOR KEY PERSONS, DECISION MAKERS, PROFESSIONALS AND MEDIA
- ELECTRONIC MEDIA PROVIDED THE NEWS and Ministry of Health talked on TV

Cicendo Eye Hospital

- The National Eye Hospital and Teaching Hospital
- Bandung City, West Java

VISION 2020, WORKSHOP

- Jakarta, June 2000
- Jakarta, June 2001
- Bandung, June 2002
- Jogyakarta, June 2003
- Bali, June 2004
- Bandung, November 2005
- Batam island, June 2006
- Bandung, October 2008

Professional Association, developed

- Standard eye services at all levels
- Standard guideline of services
- Role and responsibility
- Community ophthalmology curriculum for residency training program

Outreach services by Perdami

- Advocacy
- Mass Cataract surgery
- Partnership with local government, media and TV
What is solution for Indonesia?

- Small scale program
- High committed person in charge (full time)
- Selected conducive districts/provinces
- Strict monitoring and evaluation

SUMMARY

- VISION 2020 PROGRAM HAS BEEN DONE
- POLITICAL WILL HAS BEEN INCREASED
- PROFESSIONAL WILL HAS BEEN IMPROVED (BUT STILL NOT ENOUGH)
- GOOD PARTNERSHIP AND COLLABORATION
- BETTER COMMUNITY AWARENESS AND PARTICIPATION (IN CERTAIN AREAS)

RECOMMENDATION

1. NEED MORE GOVERNMENT ROLE
2. NEED MORE ASSISTANCE IN SURVEY, PROMOTION, AND TRAINING
3. NEED ALSO SPONSORSHIP FOR CAPACITY BUILDING
4. FACILITATED COLLABORATING WITH OTHER INSTITUTES
5. FACILITATED PRIORITY PROGRAM

Thank You