EYE CARE SERVICES AND PREVENTION OF BLINDNESS
SERVICIOS DE SALUD OCULAR Y PREVENCIÓN DE CEGUERA

EYE CARE SITUATION IN THE ENGLISH SPEAKING CARIBBEAN AND HAITI

PROGRAMA REGIONAL DE SALUD OCULAR
DIVISIÓN DE DESARROLLO DE SISTEMAS Y SERVICIOS DE SALUD
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ENGLISH SPEAKING EASTERN CARIBBEAN
(ENGLISH)

EYE CARE AND PREVENTION OF BLINDNESS PROGRAMME

PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION
ANTIGUA & BARBUDA

DEMOGRAPHIC CHARACTERISTICS
Population: 67,000

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 7.6
National health expenditure – per capita (1994): 432

HEALTH INDICATORS
Life expectancy at birth: 73.9

BLINDNESS
* See “The Barbados Eye Study - Mayor Prevalence Findings”

EYE CARE POLICY
There is no a National Policy nor Plan.

EYE CARE SERVICES
Availability
# of ophthalmologists: 2
1 ophthalmologist for every inhabitants: 33,000
# of Optometrists: 2
Antigua clearly has a sufficient number of eye care providers.

Accessibility
All Eye Care Providers are located in the Capital, St. Johns. The city is accessible from all points on the island within one hour.

Affordability
A medium income worker must spend 5.5 working days income to pay for an eye exam plus spectacles. That figure is one of the best ones in the Caribbean

Indicators
Cataract surgical rate: No data:

LOW VISION CARE SERVICES
The National Society for the Blind provides services for the blind and visual impairment.

INTERNATIONAL NGOs
The Caribbean Council for the Blind headquarters is in Antigua

SOURCES OF THE INFORMATION
4. CCB Annual reports.
BARBADOS
DEMOGRAPHIC CHARACTERISTICS
Population: 263,000
Rural population: 51.1%

SOCIO-ECONOMIC INDICATORS
People living below the poverty line (1990-1994): No data

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 13.7

HEALTH INDICATORS
Life expectancy at birth: 76.5

BLINDNESS
The Barbados Eye Study funded by the National Eye Institute US. “determined the prevalence, incidence and risk factors for eye diseases in a randomly selected sample of Barbados citizens, 40-84 years. The Barbados Eye Study (1987-1992) included 4,709 participants and measured the prevalence of open – angle glaucoma, age related cataract, age related macular degeneration and diabetic retinopathy as well as their risks factors”.

“Results of the Barbados Eye Study show that 12% of participants had visual acuity impairment worse than 6/12, with 3% having visual acuity of less than 6/60. Open – angle glaucoma was found in 7%. Only half of the glaucoma cases had been diagnosed previously. Suggested glaucoma risks factors in Afro-Americans were older age, male sex, high intraocular pressure, cataract history and lean body mass. Lens opacities were frequent and often accompanied by visual loss. Only 56% of participants had no opacities. Cataracts and glaucoma were the main causes of visual loss”.

EYE CARE POLICY
There is no an Eye Care Policy or Plan.

EYE CARE SERVICES
Availability
# of ophthalmologists: 12
1 ophthalmologist for every 22,000 inhabitants
# of optometrists: 8

Accessibility
The services are within a maximum of one hour of travelling

Affordability
No data

Indicators
No data.

SOURCES OF THE INFORMATION
2. Leske M. Cristina et all. The Barbados Eye Studies – Mayor Prevalence Findings. Dept. of Preventive Medicine, Stony Brook, N.Y.
5. Minutes of the OSWI- PAHO -WHO Task Force Workshop, Barbados 1996

DOMINICA

DEMOGRAPHIC CHARACTERISTICS
Population: 71,000
Rural population: 70%

SOCIO-ECONOMIC INDICATORS
People living below the poverty line (1990-1994): 27%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 4.7

HEALTH INDICATORS
Life expectancy at birth: 77.6

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados.

EYE CARE POLICY
A National Eye Care Plan was elaborated for 1997-2000 by the Chief Ophthalmologist with the cooperation of PAHO. At a Program evaluation in 1998 most of the targets for 1997-1998 were accomplished.

EYE CARE SERVICES
Availability
# of ophthalmologists: ½ Public, ½ Private.
1 ophthalmologist for every 71,000 inhabitants
# of Optometrists: 1 Public & 2 Private

Accessibility
While all of Dominica’s eye care specialists are located in the capital, Roseau, that city is accessible from all points on the island within one and a half hours by public transportation. In addition, 6 District receive the benefit of ophthalmologic consultation once a week.

Affordability
A median income worker must sacrifice 29 days of work in order to pay for an eye exam and glasses. A median income worker must sacrifice 58 days of work in order to pay for a cataract surgery at the available services.
The local production of eye drops started in March 1997 making saving to the government and to the public in from 50 to 500%. The main savings are in Timolol production.
Indicators
# Cataract operations: 150 (1997)
Cataract surgical rate (CSR) 1997 : 2100 per million per year (over the target of 2000).
CSR 1995:538, CSR 1996: 814,
40 Laser treatments for diabetic retinopathy were done during 1997.

EYE CARE PROGRAMS
The Public Ophthalmologic Service has an outreach program once a week of ophthalmologic consultation
that serves six districts.
The school children program makes a visual acuity screening of 2000 children a year out of 18,500 (total
for primary and secondary).

INTERNATIONAL NGOs
Brenda Strafford Foundation, Caribbean Council for the Blind, Christoffel-Blindenmission and Sight
Savers International

COSTS:
IOLs: US $20

SOURCES OF THE INFORMATION
   St. Lucia, St Kitts and Dominica. June 1998.
3. Pan American Health Organization, World Health Organization, Eye Care Program, Trip reports Feb
4. H.M. Shillingford-Ricketts MBBS Frcsc, Reports.

GRENADA

DEMOGRAPHIC CHARACTERISTICS
Population: 93,000
Rural population: 62%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 8.1

HEALTH INDICATORS
Life expectancy at birth: 71.4

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados.

EYE CARE POLICY
The National Committee has been working for the improvement of the Eye care situation in the Country,
EYE CARE SERVICES
Availability
# of ophthalmologists: 1
1 ophthalmologist for every 93,000 inhabitants
# of optometrists: 2

Accessibility
The services are within one hour of travelling.

Affordability
No data.

Indicators
Number of new ophthalmologists every year: 180 * (# to be confirmed)
Cataract surgical rate per million per year: 1900

EYE CARE PROGRAMS
School Children Screening Program & Diabetic Retinopathy Screening Program.

COSTS (1996)
Spectacles (+2:00) Minimal Cost: US $100
LIO: US $ 50
Maxitrol bottle: US $ 15

SOURCES OF THE INFORMATION
3. Dr. Elliot McGuire, informal reports.

ST. VINCENT & GRENADINES

DEMOGRAPHIC CHARACTERISTICS
Population: 115,000
Rural population: 48%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 8.8

HEALTH INDICATORS
Life expectancy at birth: 73.4

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados.

EYE CARE POLICY
A national committee exists but there is no any kind of legislation related to eye care.
# of optometrist: 3
5 Qualified ophthalmic nurses
St Lucia has nearly the required number of eye care professionals to cover the eye care needs.

Accessibility
Castsies where the Eye care Specialists are located is easily accessible from all points on the island within one and a half hours.

Affordability
25% of the population living under the poverty line has no income to devote to eye care. On a per capita income basis, the median income worker must sacrifice 20.2 days of work in order to pay for an eye exam, which is high among the Caribbean countries.

Indicators
Cataract surgical rate: 1000 million per year.

SOURCES OF THE INFORMATION
   Minutes of the OSWI- PAHO -WHO Task Force Workshop, Barbados 1996.
ENGLISH SPEAKING CARIBBEAN
Belize-Guyana-Jamaica-Trinidad & Tobago
(ENGLISH)

EYE CARE AND PREVENTION OF BLINDNESS
PROGRAMME

PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION
BELIZE
DEMOGRAPHIC CHARACTERISTICS
Population: 230,000
Rural population: 53%

SOCIO-ECONOMIC INDICATORS
People living below the poverty line: 33%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 5.3

HEALTH INDICATORS
Life expectancy at birth: 74.8

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados.

EYE CARE POLICY
A national Committee works and there is a National Eye Care Policy

EYE CARE SERVICES
Availability
# of ophthalmologists: 4
1 ophthalmologist for every 55,000 inhabitants
The number of eye doctors/ per population is acceptable worldwide.

Accessibility
The private practitioners in Belize are centered in Belize City. There is part time private coverage in the Towns of Orange Walk and Belmopan but there is no service in the south or in the more rural parts of the country. For some low income families may have limited access due to lack of good public transportation, difficulties to get enough time away from home of or work, and others may be too old or visual impairment to make the journey.

Affordability
The least expensive service, which comprise of an eye care examination and a pair of spectacles is estimated to cost about US $100. A publication by the Government of Belize in 1994 estimates that 20% of the population earned less than US $200 per annum in 1991. That represents how unaffordable is eye care for that percent of the population. It is supposed that for an additional 30% of the people, private eye care represents a huge strain on resources.

Indicators
# of cataract operations in the public sector (1998): 65
Estimated cataract surgical rate: 600 per million per year

SOURCES OF THE INFORMATION
5. Minutes of the Belize National Eye Care Workshop – 1997
7. Silva, Juan, trip Reports 1997 & 1998

GUAYANA

DEMOGRAPHIC CHARACTERISTICS
Population: 856,000
Rural population: 63%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 1.8

HEALTH INDICATORS
Life expectancy at birth: 64.6

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados. These figures can be applied to the Afro Guyanese segment of population.

EYE CARE POLICY
There is an informal National Committee and a National Plan of action that receives the support from PAHO and the International NGOs.

EYE CARE SERVICES
Availability
# of ophthalmologists: 8 (certified ophthalmologists working in the public sector: 1 in Georgetown and one in New Amsterdam.
1 ophthalmologist for every 100,000 inhabitants
# of optometrists: 8

Accessibility
Just about 50% of the population can reach a clinic within 1.5 hours. Since all the ophthalmologists and optometrists are located in Georgetown and New Amsterdam people living in the south do not have access to services.

Affordability
Compared to per capita income numbers, eye care is expensive, even for those people in the 90th income percentile. A person in the 60th income decile must spend 18 days of income to afford a consultation and glasses. In 1996 a IOL cost was US $60, a Maxitrol bottle US $10, a 10:00 suture was US $15.

Indicators
Cataract surgical rate: 600 per million per year

SOURCES OF THE INFORMATION
5. Minutes of the OSWI- PAHO -WHO Task Force Workshop, Barbados 1996

JAMAICA

DEMOGRAPHIC CHARACTERISTICS
Population: 2,539,000
Rural population: 45%

SOCIO-ECONOMIC INDICATORS
People living below the poverty line (1993-96): 34.2%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population : 14
National health expenditure – per capita (1995): 76

HEALTH INDICATORS
Life expectancy at birth: 74.7

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados.

EYE CARE POLICY
There is a partially active Prevention of Blindness Committee and National Eye care Program.

EYE CARE SERVICES
Availability
# of ophthalmologists: 32
1 ophthalmologist for every 78,000 inhabitants
# of optometrists: 25
Additional eye care providers are needed specially in the public sector.

Accessibility
With the current geographic distribution of eye care providers, patients can reach an eye care facility in a relatively short period of time. Accessibility is therefore not a problem in Jamaica.

Affordability
Affordability is a key problem in Jamaica. A medium income Jamaican must sacrifice between 19 and 52 days of work to purchase an eye exam and a pair of single vision lenses.

Indicators
Cataract surgical rate: 400 per million per year

SOURCES OF THE INFORMATION

TRINIDAD & TOBAGO

DEMOGRAPHIC CHARACTERISTICS
Population: 1,318,000
Rural population: 27%

SOCIO-ECONOMIC INDICATORS
People living below the poverty line (1995): 21%

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 population: 7.5

HEALTH INDICATORS
Life expectancy at birth: 73.8

BLINDNESS
* See figures of the Barbados Eye Study- Mayor Prevalence Findings described in Barbados.

EYE CARE POLICY
There is an active National Committee.

EYE CARE SERVICES
Availability
# of ophthalmologists: 16
1 ophthalmologist for every 82,000 inhabitants.
The number of eye care providers shall be increased.

Accessibility
Accessibility is not a problem in Trinidad. The country is small and the public transportation is non expensive. The services are at a short distance from the population.

Affordability
A medium income worker must sacrifice 18 days of work to purchase an eye exam and a pair of single vision lenses.

Indicators:
Cataract surgical rate: 2,690 per million per year.

COSTS (1996)

OURCES OF THE INFORMATION
5. Minutes of the OSWI-PAHO-WHO Task Force Workshop, Barbados 1996
HAITI & SURINAM
(ENGLISH)

EYE CARE AND PREVENTION OF BLINDNESS
PROGRAMME

PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION
HAITI

DEMOGRAPHIC CHARACTERISTICS
Population: 7,395,000
Under 15 years: 40%
Over 65 years: 4%
Rural population: 68%

SOCIO-ECONOMIC INDICATORS
GNP per capita: US $ 250
People living below the poverty line (1990-1994): 65 %

RESOURCES, ACCESS & COVERAGE INDICATORS
Physicians per 10,000 inhabitants: 15 (1995) 1.6

HEALTH INDICATORS
Life expectancy at birth: 55 years

BLINDNESS
Prevalence: More than 1% of the population.
Main causes of blindness: The main causes are cataract and glaucoma.

EYE CARE POLICY
Since 1997 there is a National Committee for the Prevention of Blindness.
National Co-ordinator by the Ministry of Health: Jean Claude Cadet

EYE CARE SERVICES & EYE CARE PROGRAMS 1997- Special report
Availability
Haiti accounts with 32 ophthalmologists most located at Port-au Prince. There are also services at
Les Cayes and Cap-Haitian. An expatriate ophthalmologist provides a service of consultation and
surgery in Las Catahobas during two weeks every year. For several years several local and foreign
teams visited Jacmel, De Chappelle, Jeremie, Cayes and Port de Paix but are not served in a regular
basis.

Accessibility & Affordability
No data Available

Indicators
An estimate of the cataract surgical rate was done for 1997 based on the informal reports as follows:
For all the country, the estimate was 150 per year per million, 333 for the West Department, 264 for
the North, 40 for the Centre. No data is available from the other six Departments.

LOW VISION CARE SERVICES
The Haitian Society for the Help of the Blind- SHAA, the St. Vincent School for the Blind and the
Ministry of Education have some programs in education and rehabilitation for the blind. There is no an
specific program in low vision.