Health system dynamics analysis of eye care services in Trinidad & Tobago and progress towards Vision 2020 Goals

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Introduction

• The Vision 2020 strategy to reduce avoidable blindness was launched in the Caribbean, and in Trinidad and Tobago, in 20001

• This study aimed to comprehensively review the eye care system in Trinidad and Tobago in 2014 at the time of the National Eye Survey,2 to assess progress towards the Vision 2020 objectives

Methods

• We administered structured surveys to 7 stakeholder groups including all ophthalmologists, optometrists, public health centers, and public hospital eye department administrators in Trinidad and Tobago, plus samples of eye clinic out-patients, general practitioners and a population-representative sample of the general population aged > 40 years (National Eye Survey of Trinidad and Tobago participants).2 We also reviewed reports, registers and policy documents. We synthesized data using the Health System Dynamics Framework3

Results

• Response rates in each group are shown in the Table

• Leadership & Governance: There was no Eye Health Committee or National Coordinator within the Ministry of Health

• Values and Principles: Eye health was incorporated into wider socioeconomic policies but there was no national plan for inclusive education for the blind

• Delivery of Eye Care Services: There was a low vision service and the cataract surgical rate exceeded target level of 3000 per 1 million population. However, there was no diabetic retinopathy screening/treatment program, no neonatal eye examination, no ROP screening program or national prevention policy, and insufficient human resource capacity for blinding pediatric conditions

• Human Resources: Minimum ratios per 50,000 population were achieved: ophthalmologists (1.2), optometrists (1.3), dispensing opticians (2.0). No in-country lab technicians to service ophthalmic equipment

• Equipment and Supplies: Access to free glaucoma medication through regional procurement and distribution. However, no integration of an active primary eye care service into primary health care system. No spectacle lab in country. Only 3/5 public eye hospital departments had a visual field analyzer, 1/5 had access to FFA, and none had OCT.

Conclusions

• Financing: Trinidad and Tobago is a high income nation but only 4.8% of GDP spent on healthcare. Approximately 9.5% spent on eye care. Pluralistic eye care system with universal, free basic eye care and private sector provision of more specialized services. 18.5% of population have health insurance, and approximately 63.7% pay out-of-pocket for private eye care.

• Training and public education: Trinidad has a BSc Optometry degree program, but no formal postgraduate training/examination system for ophthalmologists. The Ministry of Health and Professional Societies for Ophthalmologists and Optometrists contribute to World Sight Day activities, Glaucoma Awareness Programs and other education activities for the public relating to eye health.

• Outcomes: The National Eye Survey of Trinidad and Tobago 2013-2014 identified that amongst adults over 40 years, 0.7% were blind and 5.4% had moderate or severe vision impairment. The leading causes were cataract, cataract and diabetic retinopathy. 65% of blindness was potentially avoidable

• Goals: There was a national school vision screening program, but no public sector optometry services. The Ministry of Health aimed to develop an evidence-based national eye care strategy

Key References


2 National Eye Survey of Trinidad and Tobago 2013-2014


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