## Address by the Honourable Dr. Fuad Khan Minister of Health Opening Ceremony of the 2012 Congress of

# The Ophthalmological Society of the West Indies Hyatt Regency Hotel Wednesday 11<sup>th</sup> July, 2012 @ 2:00pm

#### **Salutations**

- Chair of programme and President of the Ophthalmological Society of Trinidad and Tobago, Dr Boysie Mahabir
- Dr Donovan Calder, President of the Ophthalmological Society of the West Indies
- Dr Mark Mannis, President of the Pan American Association of Ophthalmology and Professor and Chairman of Ophthalmology, University of California
- Dr Desiree Murray, Lecturer in Ophthalmology, University of the West Indies
- Dr Juan Carlos Silva, PAHO/WHO Eye Care Regional Adviser for Latin America and the Caribbean
- Mrs Christina Sanchez-Miller, Chief Executive Officer International Sight Restoration Eye Bank
- Professor Rupert Bourne Ophthalmologist, Anglia Ruskin University
- ❖ Professor Samuel Ramsewak, Dean, Faculty of Medical Sciences
- ❖ Dr Michael Brennan, Former President of the American Academy of Ophthalmology
- Ophthalmologists, optometrists and other partners in health
- Specially invited guests and members of the media

#### Good evening

It is my pleasure to be among you colleagues in the medical profession, not just from within Trinidad and Tobago but around the region. I extend a warm welcome to all visitors to our nation and I wish you a wonderful stay.

The area of eye care has been identified as a pressing issue in Trinidad and Tobago. One area the Ministry of Health of Trinidad and Tobago hopes to address is the lack of data on eye health and blindness. One of the things we do know is that seventy per cent of the eye surgeries performed in Trinidad and Tobago is for the removal of cataracts.

Approximately 2,500 cataract extractions per year are performed at our public hospitals, with approximately 3000 new cases being presented annually. Because of this long waiting time, up to 2 years in some regions, many persons become blind or visually impaired due to this readily treatable condition. Uncorrected refractive error is also a major cause of visual impairment, yet there is only one optometrist working in the public sector in the country.

The burden of these and other readily avoidable diseases such as diabetic retinopathy in the country is unknown. The last, admittedly incomplete, assessment of blindness in Trinidad and Tobago took place in 1932. Without an evidence base, it is extremely difficult to effectively plan a program of eye care which reaches across the population as a whole. With respect to the delivery of eye care, each of the regional health authorities recognizes the need to address the burden of eye disease, but there is a lack of coordination between them.

However, several important developments have occurred recently, specifically the establishment of a DM Ophthalmology program and a BSc Optometry program at the University of the West Indies, which means that the local eye care professionals of tomorrow are now being trained here at home. This provides a new opportunity to train staff to deliver high quality eye care tailored to the specific needs of Trinidad and Tobago, and makes the planning of this study extremely timely. There is an urgent need to understand the prevalence of blindness and visual impairment in Trinidad and Tobago, in order to provide an evidence base on which to structure delivery of resources.

Hence, the National Eye Survey of Trinidad and Tobago, or NESTT, will be undertaken by the University of the West Indies, in collaboration with the Anglia Ruskin University of Cambridge in the United Kingdom, and in conjunction with ophthalmologists, optometrists and eye care teams, in both countries. The other stakeholders involved in this project are:

- The government of Trinidad and Tobago;
- The World Health Organization (WHO) International Agency for Prevention of Blindness (IAPB)
- The Pan American Health Organization (PAHO) Regional Office;
- The Ophthalmological Society for Trinidad and Tobago (OSTT);
- The Trinidad and Tobago Blind Welfare Association; and

• Diabetes physicians.

#### NESTT has three parts:

- 1. A situational analysis of current eye care demand and capacity;
- 2. A Population-based nationally representative survey of eye disease in which 7,000 randomly chosen subjects aged 5 years and over will be examined for eye disease; and
- 3. **Pilot studies and the implementation of improved eye care pathways.** The findings of Part 1 will be used and matched to the unmet need established by Part 2, to pilot effective eye care pathways such as cataract referral and follow-up, childhood vision screening, and diabetic retinopathy screening.

The situational analysis will involve an assessment of the distribution of eye care within Trinidad and Tobago focusing on resources and infrastructure, in relation to the demographic distribution of the population. It will be modelled on the Vision 2020 method, satisfying the basic needs of a standard WHO/PAHO tool, but will be more detailed and will have a much more practical use than the very basic indicators that the Vision 2020 programme currently requires. It will involve 5 principal ocular diseases:

- refractive error,
- cataract,
- glaucoma,
- diabetic retinopathy and
- Childhood diseases.

A research instrument will be designed to collect data on case detection and expected prevalence of these conditions. The instrument will be used to gather data from different healthcare providers (e.g. ophthalmologists, general practitioners, optometrists, both in the state & private sectors) and various representatives of healthcare consumers in a structured manner. There will also be a form of cost analysis of services (for future guidance of means testing/subsidization) and speed of delivery analysis of services. The results of these enquiries will inform a gap analysis. A mapping exercise will follow to provide region-specific data.

In order to effectively plan distribution of resources to minimize the impact of visual impairment and blindness in T&T, we need to understand the burden of eye disease within the country. Few countries have performed 'nationally-representative' studies.

Although ophthalmologists at the secondary care level may be able to give an overview of their activity, they will be unable to accurately determine the burden of disease in the population because of the biased nature of the sample of the population that attends their clinics. The NESTT project involves randomly selecting hundreds of households in the country to achieve a given sample size which will allow us to estimate the prevalence of visual impairment and blindness within a given level of certainty. Without performing such a population-based survey, it is impossible to accurately estimate the burden of known and undiagnosed eye disease in the population. In summary, the Part 2 of NESTT will achieve the following objectives:

- i. To establish the age- and sex-specific epidemiologic profile of ocular disease among those aged  $\geq$  5 years in Trinidad & Tobago.
- ii. To establish the prevalence of eye disease that includes cataract, glaucoma, diabetic retinopathy, uncorrected refractive error, and macular disorders.
- iii. To perform a KAPB (Knowledge, Access, Practices, Behaviours/Beliefs) study.
- iv. To identify cases of ocular disease for treatment (the 'service' component)

A representative randomized cluster sampling method using probability proportional to size (PPI) methods stratified by urban/rural location will be used to select multiple cluster sites (rural and urban) of approximately 50-100 subjects in each cluster. A sampling frame of cluster sites will be obtained from the **Central Statistical Office**. Subjects will be enumerated using the random walk method within each cluster site which involves sufficient numbers of households to yield the required number of eligible subjects for the study. This is an accepted methodology used in many population-based surveys of eye disease, and there is experience of such methodology available from the Central Statistical Office of T&T, as this has been used to perform studies on diabetes in the past.

The sample size is approximately 7,000 subjects in 80 cluster sites. This sample size was calculated based on the age structure of the population of Trinidad and Tobago as well as a review of the Barbados Eye Study (1997 – 2003), which showed an 8.8% prevalence of visual impairment in subjects over 40 years old.

The situation analysis and preparation for the pilot studies will take place this year, and it is expected that the National Survey would take place between February to September 2013 with primary outcomes being announced in December 2013 and the pilot studies commencing in 2014.

My dear colleagues, as you know, Diabetes, heart disease, stroke and cancers account for four out of the five leading causes of death in Trinidad and Tobago, and these Chronic Non Communicable Diseases or CNCDs, are responsible for sixty percent of all deaths in our country. In addition, Trinidad and Tobago has the disquieting honour of being the country with the highest rate of diabetes in the Caribbean, with a prevalence rate among adults of approximately 12% - 13%, that is, 1 in 8 adults has diabetes (and this may be as high as 1 in 5).

Diabetes is not only a major cause of admissions to our hospitals, as there are many health complications linked to the disease but according to World Health Organization reports, after 15 years of diabetes, approximately 2% of people become blind, and about 10% develop severe visual impairment.

The large numbers of the population presenting with cataracts is also linked to this high prevalence of diabetes in Trinidad and Tobago. Cataracts and glaucoma have been found to be twice as common in patients presenting with diabetes than those without it.

The Ministry of Health continues to push ahead with its agenda to curb these Chronic Non Communicable Diseases through its national Fight the Fat initiative, which aims to educate the national community about chronic non communicable diseases and the importance of leading healthy lifestyles, and knowing their personal health statistics. As the year progresses you will continue to hear more about this programme as we embark on a more high profile mass media campaign. We also have a grand, exciting, but very healthy event planned at the Queen's Park Savannah on August 12<sup>th</sup> in observation of

our nation's  $50^{th}$  independence anniversary. Keep checking the print and other media for more details. I hope to see you all there!

However, to minimise the existing backlog of patients waiting for cataract surgery, the Ministry of Health has been engaging in public/private health sector partnerships to decrease the cataract waiting list. I am pleased to share that last week a 3-year Memorandum of Understanding was signed between the Ministry of Health, the South-West Regional Health Authority and the University of Utah, John A. Moran Eye Center. This MOU establishes an institutional partnership with the San Fernando General Hospital for the ongoing training and transfer of knowledge on Corneal Transplantation, Small Incision Cataract Surgery (SICS) and Macular/Retina and Paediatric Ophthalmology. This sustained Subject Matter Expert Exchange will lay the foundation for the San Fernando General Hospital to become an area of advanced eye care and a "Centre of Excellence in Ophthalmology" for the Caribbean and Central America region.

The MOU is part of the continuing cooperation in the area of eye care between the United States of America and the Government of the Republic of Trinidad and Tobago, the Ministry of Health, University of Utah's John A. Moran Eye Center and the U.S. Army which has been ongoing since 2008. Designed as a train the trainer programme, the programme's intent is to reduce the cost and waiting times for cataract and corneal transplant surgeries by teaching a few doctors from a country with these techniques, then having them pass on their skills to other doctors in their homeland.

### Some major milestones of the MOU are:

- In March, 2010, Drs. Ronnie Bhola and Anil Armoogum of the San Fernando General Hospital participated in a Training Fellowship at the Tilganga Eye Hospital (Nepal) under Dr. Geoffrey Tabin from the University of Utah, John A. Moran Eye Center. The tutorage transferred Small-Incision Extracapsular Cataract Surgery (SICS) knowledge to Trinidad and Tobago.
- In February, 2011, Dr. Tabin participated in a U.S. Army sponsored Subject Matter Expert Exchange at the Eric Williams Medical Centre (EWMSC) and demonstrated Corneal Transplant and Complicated Cataract Surgeries to Drs. Bhola and Armoogum, and local ophthalmologists, optometrists, doctors, nurses and other medical staff from both the public and private sector.

- (3) Corneal transplants and (39) Small-Incision Extracapsular Cataract surgeries or SICS were done at the Subject Matter Expert Exchange at the EWMSC and SICS was launched as a new cataract operational model.
- ❖ In 2012, both Drs. Bhola and Armoogum will participate in the University of Utah, John A. Moran Eye Center sponsored Observer Fellowship in Macular/Retina and Paediatric Ophthalmology at the University of Utah's John A. Moran Eye Center
- ❖ Since March 2011, the Ministry of Health has implemented cataract project support and has renovated the San Fernando General Hospital (SFGH) Eye Clinic with two fully equipped ophthalmic surgical suites.

As part of our ongoing efforts to reduce the existing cataract surgery waiting list, I have implemented a programme to accelerate the number of surgeries being performed each month. These persons on the existing cataract surgery waiting list will be sent by the Ministry of Health to a private sector institution to have the surgery done, and the cost will be covered by the Ministry. So again, I am appealing to all citizens who have been scheduled for cataract surgery after June 2012, please collect and submit a request for surgery form at our Head Office or online at www.health.gov.tt.

Ladies and gentlemen, I want to thank you again for being partners in protecting our region's population's right to sight. My government, through the Ministry of Health remains committed to making high quality health care accessible to all citizens of Trinidad and Tobago.

Thank you.