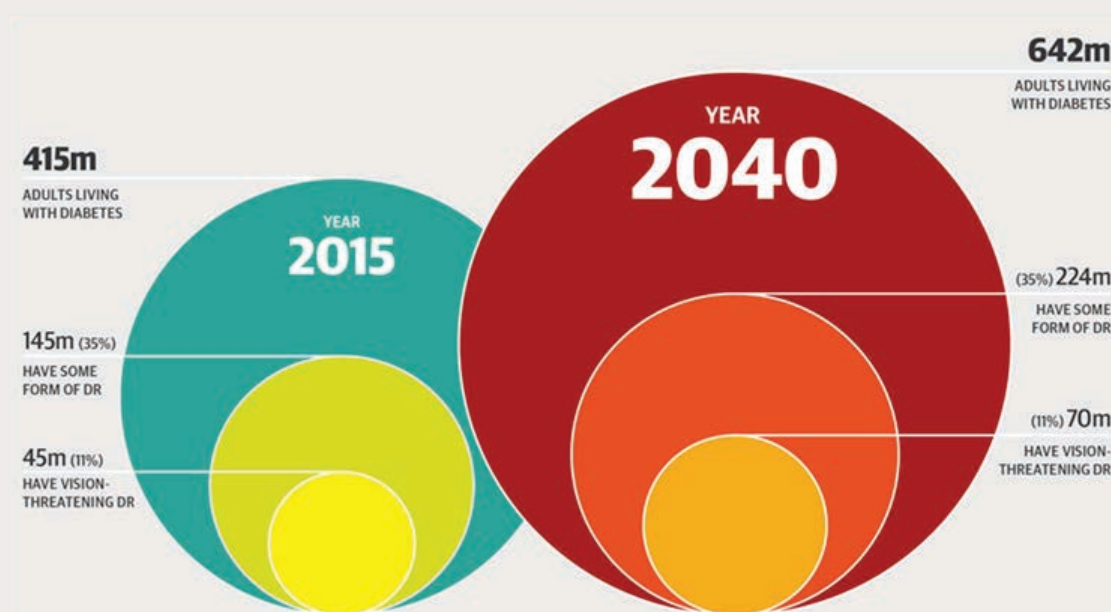


Strengthening diagnosis and treatment of diabetic retinopathy in the South-East Asia Region



**Global burden of diabetes and diabetic retinopathy (IAPB vision atlas)
June 2020**



World Health Organization
REGIONAL OFFICE FOR South-East Asia

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REGIONAL OFFICE FOR

**World Health
Organization**
South-East Asia

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Foreword-I



Vision is our most dominant sense. It plays a critical role in every facet and at every stage of a person's life. The WHO South-East Asia Region has in recent years made significant efforts to increase access to quality eye health services to achieve universal health coverage and ensure no one is left behind, in line with the Region's Flagship Priorities and Sustainable Development Goal 3.

WHO's first World Report on Vision, published in 2019, shows that at least one billion people globally suffer from preventable vision impairment that is yet to be addressed. Unaddressed refractive error and cataract continue to account for the majority of the burden, however eye care programmes are increasingly facing newer challenges, mainly related to ageing, population growth and lifestyle factors. Diabetic retinopathy is one such challenge.

Diabetic Retinopathy is a disease of the retina and its blood vessels that is caused by the long-term impact of diabetes mellitus. It is an increasingly significant cause of vision impairment and blindness in the Region, where the prevalence of diabetes is rising. The International Diabetes Federation estimates that the number of people with diabetes in seven of the Region's countries is likely to increase from 87.6 million in 2019 to 115.1 million by 2030. This will in turn increase the prevalence of diabetic retinopathy, with estimates suggesting the age-adjusted prevalence of the disease will increase from 11.3% in 2019 to 12.2% in 2030. Immediate and decisive action is required to control diabetes and with it, diabetic retinopathy.

The ravages caused by diabetic retinopathy are preventable. There is strong evidence that effective management of diabetes and associated systemic conditions postpones and reduces the incidence of sight-threatening retinopathy, and also improves prognosis. Periodic eye examinations by ophthalmologists, accompanied by standard treatment of diabetic retinopathy, can postpone serious loss of vision.

The following guidelines, which are aligned with the integrated people-centred eye care model recommended by the World Report on Vision, highlight the critical need for countries to adopt a coordinated and multisectoral approach to reduce the incidence of diabetes and the onset of diabetic retinopathy.

Programme managers must identify and implement evidence-based, well planned and feasible strategies at all levels of the health system. The guidelines specifically focus on the need for preventive, diagnostic and therapeutic interventions that are standardized and which are clear and can easily be implemented at all levels of care.

WHO recommends that these expert-developed guidelines and recommendations be reviewed after three years and before five years. Together we must continue to identify and apply the best, most effective interventions to prevent and treat diabetic retinopathy for the health and well-being of all people in our Region.

A handwritten signature in black ink, reading 'P. Khetrpal'.

Dr Poonam Khetrpal Singh
Regional Director
WHO South-East Asia Region



Foreword-II

It gives me great pleasure to introduce the South-East Asia Eye Health Expert Group's "Strengthening diagnosis and treatment of diabetic retinopathy in the South-East Asia Region". The expert group was formed by the World Health Organization (WHO) and the International Agency for the Prevention of Blindness (IAPB) for the Region. The two organizations have a long history of collaboration in this Region and around the world. The impact of the global initiative, "VISION 2020: The Right to Sight" and the World Sight Day which is celebrated on the second Thursday of October every year, have been key successes in the past. "Treatment and operational guidelines for diabetic retinopathy for South-East Asian countries", is one more example of this fruitful collaboration in the South-East Asia Region.

IAPB would like to place on record our appreciation of Dr Poonam Khetrapal Singh, Regional Director of the WHO South-East Asia (SEA) Region, for supporting and approving this document. My sincere gratitude also goes to Dr Thaksaphon Thamarangsi, Director, Department of Healthier Populations and Noncommunicable Diseases (HPN) WHO SEA Region Office, and Dr Patanjali Nayar, Regional Adviser, whose support and guidance were instrumental in organizing an eye health expert meeting in Kathmandu in December 2019. The meeting led to the formation of a diabetic retinopathy (DR) expert group, and culminated in the preparation of this document.

I am also very thankful to Dr Taraprasad Das, IAPB Regional Chair for the SEA Region. Dr Das is a global authority on vitreoretinal disease. He took the lead in the preparation and publication of this very useful document.

Data from the Vision Loss Expert Group shows that blindness and vision impairment due to diabetic retinopathy (DR) are emerging global eye health challenges, more so among the populations of SEA countries. The early detection and treatment of DR is a crucial part of service delivery. If not detected on time, it can lead to irreversible blindness or vision impairment. The operational and treatment guidelines on diabetic retinopathy for SEA have highlighted these issues in the Region. They provide coherent solutions and recommendations that are very useful for those providing eye care services from the primary to tertiary level. I do hope that hospital

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