

# Editorial: The Myopia Tsunami: A Looming Public Health Crisis

Saif Ullah

## Introduction:

Myopia has emerged as one of the most serious public health problems in eye care around the globe. It was formerly believed to be a harmless refractive error, but is now known to be a progressive disorder that can be sight threatening. However, the situation of myopia has been transformed in recent decades, particularly in east and south Asian countries, with more than 80% of school aged children affected. It is estimated that by 2050, almost half of the world's population will be myopic and that 10% will develop high myopia and its complications such as retinal detachment, glaucoma, cataract and myopic maculopathy<sup>1</sup>.

This epidemic is a result of multiple factors. Urban lifestyles, less time spent outdoors, to longer use of digital devices and increased near work are factors that have accelerated onset and progression<sup>2</sup>. The influence of the environment is now known to be dominant and genetic predisposition is of importance. The key point is that each 1 diopter of myopia has an increment risk of developing permanent vision threatening diseases. A risk of Macular Degeneration is increased by approximately 67% for every diopter<sup>3</sup>, a risk of retinal detachment is increased by nearly 30% for each diopter and a risk of open angle glaucoma is increased by approximately 20% for every diopter<sup>4,5</sup>.

This “myopia tsunami” not only threatens the individual vision, but the performance of healthcare systems, economies and educational results on a global scale.

## Conclusion:

There is a need for urgent action by clinicians, researchers, educators and

policymakers due to the increasing burden of myopia. There are a few evidence-based interventions with great potential such as low dose atropine<sup>6</sup>, orthokeratology and myopia control lenses that are not readily available or economical. Organized programmes of outdoor activity and public health announcements to parents and schools are also of paramount importance in the field of preventive interventions.

The conversation needs to be with a strong leadership from the Ophthalmology and Optometry profession, and in support of the inclusion of myopia as a health priority for the world. The crisis must be handled in an interdisciplinary way. Without intervention, this myopia tsunami will begin to change the whole face of vision care, and make it a silent pandemic of blindness.

## References:

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