Myopia is often seen as an eye-focusing disorder, easily corrected with monofocal spectacles. However, a rising prevalence of myopia has led to a greater emphasis on prescribing myopia control. Myopia affects 27% of people worldwide, and that prevalence is projected to double by 2050.\(^1\) In some Asian countries, the prevalence of myopia can be as high as 84%.\(^2\)

This article provides several perspectives on the importance of myopia management.

**THE MEDICAL PERSPECTIVE**

It is essential for clinicians to consider myopia not just as a refractive disorder, but also as a disease with the potential to cause permanent vision loss. Myopia is associated with an increased risk of retinal complications, cataracts, and glaucoma.\(^3\)–\(^9\) The World Health Organization defines high myopia as spherical equivalent objective refractive error of $\geq -5.00$ D in either eye.\(^10\)

Depending on the magnitude, myopia can increase the risk of retinal detachment by 2.4 to 24.0 times and primary open-angle glaucoma by 2.0 to 2.5 times.\(^9\)–\(^11\) Even low amounts of myopia are associated with increased risk of developing posterior subcapsular cataracts.\(^6\)

To look at the risk ratios for ocular complications from a different perspective, think of moderate systemic hypertension.\(^12\) A systolic blood pressure of 150 mm Hg to 159 mm Hg increases the risk of stroke by 2.2 times.\(^13\)

Most doctors would agree that this level of elevated blood pressure warrants efforts to prevent stroke and...
other cardiovascular disease with education and preventive medicine. Although myopic ocular complications may be considered less serious than strokes, the high risks of ocular complications associated with high myopia are concerning and should be addressed clinically.

THE ECONOMIC PERSPECTIVE
In a cross-sectional survey distributed globally to eye care professionals, 67.5% of respondents reported prescribing only single-vision spectacles or contact lenses to manage myopia. Of these practitioners, 35.6% reported being concerned about the cost associated with myopia control. Practitioners must not be nearsighted about the cost of myopia control. The cost of optical correction in Singaporean adults alone is estimated to be about $755 million. Vitale et al estimated the direct cost of refractive error in the United States to be between $3.9 billion and $7.2 billion per year. The cost of care is expected to increase significantly due to the increasing prevalence of high myopia.

High myopia causes even greater direct optical costs for patients. For example, high-refractive-index spectacle lenses are typically costlier than polycarbonate lenses. Complications from high myopia can lead to increased direct care costs from surgery and doctor visits. Indirect costs may result from decreased productivity as a result of vision loss.

THE PATIENT PERSPECTIVE
The patient’s quality of life is an aspect of myopia that is often overlooked by practitioners; however, it should be considered in managing myopia. A survey found that orthokeratology had a positive effect on children’s quality of life, with increased self-confidence and participation in extracurricular activities reported. Similar results were found in a randomized study comparing the quality of life of pediatric contact lens wearers with spectacle wearers; pediatric contact lens wearers reported improved activity, appearance, and satisfaction with correction compared with spectacle wearers.

THE PRACTICE MANAGEMENT PERSPECTIVE
Patient education is the most important component of building a myopia control practice. Given that health illiteracy is a common problem in the United States, it is important to clearly define myopia and its potential future complications for patients. One study showed that a limited ability to correctly define myopia was not associated with sex, income, or education. Therefore, our clinic attempts to explain diagnosis and treatment to patients in simple ways to improve their understanding. To further this goal, our clinic has created consent forms in Spanish and English, brochures, and a user-friendly website.

It is also important to explain to patients why myopia progression occurs. Development of myopia is linked to genetics. Patients have a 2.08 times greater chance of becoming myopic with one myopic parent and a 5.07 times greater chance with two myopic parents. Research
also suggests that an increase in myopia prevalence is associated with spending less time outdoors, and not necessarily with near work.  

We explain to patients that myopia is likely due to a mixture of environmental and genetic factors. Our patients always receive a brochure and fact sheet that includes citations of important myopia publications, so they have the opportunity to review the data for themselves.

A TOP PUBLIC HEALTH PRIORITY

The increase in myopia prevalence has become a major public health concern. It is estimated that there will be almost 1 billion high myopes worldwide by 2050. The time to act is now. It is important for practitioners to view myopia as a genetic and environmental condition with clear visual and economic effects.

The increase in worldwide urbanization, which appears to promote myopia development, combined with the increase in economic burden associated with myopia, makes combating myopia a top public health priority. Providing myopia control education to patients is now considered a standard of care. Building a myopia control practice can help you provide the highest quality care to your young patients.


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