Are we being shortsighted about shortsightedness?

The number of people becoming myopic (short-sighted), has doubled over the last three decades across the world, reaching levels of 20-50% in Europe and America, and around 80% in East and South East Asia in certain age groups. Once developed, myopia is a life-long condition that has been associated with lower quality of life and increased risk of developing sight-threatening complications such as retinal detachment myopic maculopathy, and glaucoma. As myopia develops during the childhood, it is important to detect it as early as possible and prevent its progression. In recent years, several methods have been developed and have been shown to reduce myopia progression by 20-70%. These include bifocal and multifocal spectacle lenses, soft multifocal contact lenses, orthokeratology (an overnight application of specially designed rigid contact lens to mould the front surface of eye to give perfect vision without lenses during the day), pharmaceutical treatments, and increased outdoor activity. However, most of the methods for controlling myopia are not yet widely available to the general public

In a recent survey led by researchers at Aston University in Birmingham, eye-care practitioners across the globe were questioned regarding their awareness of the increasing rates of myopia in children, their most frequently prescribed myopia management strategies and their relative effectiveness and their reasons for prescribing conventional spectacles when myopia control strategies are available. Around 1000 responses were received and the results showed that eye-care practitioners are generally aware of various methods of myopia control. Unsurprisingly, the concern was the highest among the eye-care professionals in Asia. However, regardless of their geographical location, practitioners correctly identified orthokeratology, pharmaceutical agents and outdoor activity as the most effective methods to slow down myopia progression. Nevertheless, two thirds of practitioners would still only consider conventional glasses or contact lenses for correcting their myopic patients, citing increased cost (35.6%), the lack of convincing information (33.3%) and unpredictable outcome (28.2%) as the main setbacks. Also, they indicated that parental knowledge and interest in preventing their child’s myopia developing play an important role, when considering viable options for younger patients.

It is clear that myopia is not a minor inconvenience that can be easily corrected with spectacles. As a result of this research, guidelines for myopia control are being developed for eye care practitioners to inform their clinical practice and to make these potentially sight saving techniques more available globally. Myopia Control guidelines will be one of the main topics discussed by the world’s top researchers in the International Myopia Conference held in Birmingham in 2017.

Myopia is one of the main research interests of the Aston University Ophthalmic Research Group (ORG). The Aston University Optometry Clinic runs a specialist Myopia Clinic which is open to the public.

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