

ABDO Position Paper:

The role of Dispensing Opticians & Contact Lens Opticians in Myopia Management



The subject of myopia management is of increasing interest, with more evidence emerging of an increasing world-wide prevalence of myopia. A recent review estimated that 22.9 per cent of the world's population has myopia and 2.7 per cent had high myopia in 2000. By 2050, these figures are predicted to increase to 49.7 per cent and 9.8 per cent, respectively¹.

Alongside this increasing data on the shift in the refractive status of a large proportion of the world's population, there is increasing evidence that a number of interventions can retard the progression of childhood myopia². Dispensing opticians and optometrists have a duty of care to children, as a legally protected group of patients, to understand the subject and to give advice.

All General Optical Council (GOC) registrants should be able to discuss the increased risk of eye pathology later in life as a consequence of myopia: certain forms of cataract, retinal detachment, glaucoma and myopic maculopathy³. All GOC registrants have a statutory duty to remain up-to-date. This includes understanding the risks of developing myopia, the interventions, recommendations and the advice which should be given.

Working as part of the practice team, dispensing opticians should be seen as a source of objective, knowledgeable and up-to-date information on research in the field of myopia management. For instance, advice on time spent outdoors may help reduce the risk of onset of myopia in a proportion of children^{2,4}.

An understanding of the current thinking on medication for myopia management is not challenging. Atropine is not currently licenced for myopia management in the UK, is not available on the NHS and the current studies on its long-term effects will be some years before being finished.

Eye care practitioners, including dispensing opticians, already provide advice and correct misconceptions which parents/carers or the patient may raise, such as wearing an accurate stronger prescription makes the eyes worse. Recent well-designed studies have shown that under-correction in spectacles can actually increase the progression of myopia or have no benefit when compared to full single vision spectacle correction⁵.

Myopia management research is subject to ethical difficulties as it involves children. There are complications that arise due to the required long-term nature of reliable studies. Research is still ongoing to better understand the aetiologies of myopia as well as the efficacy of management strategies. The latest data indicates efficacy of current optical intervention methods varies, with contact lenses (soft multifocal and OrthoK) showing a greater effect than spectacle interventions.

High set bifocals and PALs show some effect, particularly for children presenting with esophoria at near or a lag of accommodation⁵.

Dispensing opticians are the most highly educated, knowledgeable and experienced practitioners in the UK eye-care profession when it comes to dispensing spectacle products to patients. Specifically designed myopia management ophthalmic lenses are in development and can be expected to become available to the eye-care profession in the UK in the future. As these lenses are specifically developed for children they should only be dispensed by DOs or under supervision.

Contact lens practitioners should already know much about Ortho-K and centre distance multi-focal contact lenses, while dispensing opticians will have a working knowledge of basic principles. There are specific soft contact lenses which are already licenced for myopia management use in the UK and are being fitted by specifically trained contact lens opticians and optometrists. A CE marked intervention should always be considered initially, though off-label use of a medical device may be considered a strategy in some cases. Practitioners choosing to fit a product off-label do so under their own professional judgement. They must always be able to justify their clinical actions and decision making and should discuss the use of any product with the patient and the manufacturer. All of this must be recorded fully on the records.

The topic of myopia management will feature ever more in the professional and mainstream media and the general public will be raising the topic in our practices. Working outside of the examination room the dispensing optician is highly accessible to the patient and patient's carers and often spends more time in their patient interactions than other members of the practice team. This makes them a key part of the practice approach to myopia management.

It is vital, considering their duty of care to their patients, that dispensing opticians have up-to-date, evidence-based and/or best practice knowledge around myopia management and continue keep up to date in this subject area.

References:

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4. Rose KA et al. Outdoor activity reduces the prevalence of myopia in children. *Ophthalmology*. 2008;115(8):1279-1285
5. Wildsoet CF, Chia A, Cho P, et.al. IMI - Interventions Myopia Institute: Interventions for Controlling Myopia Onset and Progression Report. *Invest Ophthalmol Vis Sci*. 2019;60:M106-M131.