


# Re:View

Keeping excellence in your sights | September 2019 | Issue 37



College going  
even greener!

---

Dealing with  
personal challenges

---

Tips on finding  
low vision patients

# Here's to a golden September



September is here, and once again the lecturers and support staff at ABDO College are packing away their sunglasses, flipflops and

barbecues, as they prepare to welcome the return of many familiar student faces and 'newbies,' who will soon become old friends too. (To avoid a revolt though, I must acknowledge that the College team all work very hard behind the scenes throughout the summer too!)

*Re:View* is the magazine for your College community, and in it you'll find interesting and informative articles from lecturers, support staff, and students past and present. This time, we feature a helpful Q&A section about the contact lens block course.

Also included in this issue is a thought-provoking article by former degree student Eleanor Walker, on the hot topic of myopia control in children. With such 'proven' success rates for orthokeratology contact lenses, and other methods for controlling the progression of myopia, is this a subject which we should all be raising with the parents of myopic children? Eleanor points out both the weaknesses and strengths of the studies cited in her research.

There is far more to a student's life than academia, as Mark Nevey's article reminds us as he describes the challenges which he and several others have had to overcome to achieve the longed-for goal of their professional qualification. If you find yourself encountering similar hurdles, Mark's advice is not to struggle on alone, but to reach out for support, both at home and at the College.

Finally, Gillian Smith's excellent article reminds us that low vision is a GOC core competency, and that we should all be aware of the needs of these patients.

## **Angela McNamee**

BSc(Hons) MCOptom FBDO (Hons) CL FBCLA Cert Ed

**Chairman,  
ABDO College Board of Trustees**

## Contents

- 1–3** News
- 4** Your questions answered on the contact lens block release
- 5–6** Overcoming personal challenges while studying
- 7** Graduate profile: Eleanor Walker BSc(Hons) FBDO
- 8–9** Orthokeratology contact lenses for myopia control in children
- 10–11** Advice on finding low vision patients
- 12** Charity decathlon pictures special
- 13** Find out more about ABDO College's Book and Equipment Shop administrator, Justin Hall

## **ABDO College**

Godmersham Park, Godmersham, Canterbury, Kent CT4 7DT

tel: 01227 738 829 option 1 | fax: 01227 733 900 | [info@abdocollege.org.uk](mailto:info@abdocollege.org.uk) | [www.abdocollege.org.uk](http://www.abdocollege.org.uk)

[www.twitter.com/abdocollege](https://www.twitter.com/abdocollege) | [www.facebook.com/ABDOCollege](https://www.facebook.com/ABDOCollege)

[www.linkedin.com/company/the-abdo-college-of-education](https://www.linkedin.com/company/the-abdo-college-of-education) | [www.instagram.com/abdocollege](https://www.instagram.com/abdocollege)





# News

## ABDO College widens its eco credentials

ABDO College is celebrating the success of a major boost to its ongoing campaign to be more environmentally friendly. By moving as much of its work online as possible, the College is saving over 475,000 sheets of paper each year.

The College's head of operations, Steve Hertz, emphasised that the two largest areas of progress in the campaign are in the coursework and application processes.

"This is the first year that all ABDO College courses will be online, meaning not only that all students will have access to the extra resources and support that the virtual learning platform brings, but with the old coursework folders being over 500 pages long, it doesn't take a rocket scientist to work out that the paper savings are enormous," he highlighted.

"The online application system, which went live in May, has reduced the amount of paper used, not only at the College but also with the applicants themselves," he added. "In previous years, many applications were 10 to 15 pages long by the time exam certificates, supervisor declarations, personal details and practice information were provided. Multiply this up by almost 1,000 students and once again, the impact cannot be understated."

The move online has inspired the College to look further at boosting its green credentials. Over 9,000 plastic cups were used last year and the College is seeking to reduce that by issuing new cups for each block release student this month. "Our other major area of focus is in

single use plastics, inspired by the swell of public support for the campaigns of Messer Attenborough, Fearnley-Whittingstall *et al*," said Steve. "The College drinks machines are very popular, and the number of plastic cups used is staggering, even though the majority of these cups are in fact recyclable. However, the issue of getting them to the appropriate facility has always been difficult, with so many bins around the building being general waste.

"In order to combat this issue, we will be giving every student that attends a block release with us their own re-usable, sustainably sourced, bamboo drinks tumbler cup.

"This will be compatible with the drinks machines and will be suitable for hot and cold drinks and available in a choice of colours. Cups and bottles will be available from reception for those students who need extras.

"We are also purchasing extra recycling bins to enable any appropriate bottles, containers, wrappers etc that the students

bring in with them, to be disposed of more effectively," he concluded.

One department that has been environmentally friendly for a long time is the College Book and Equipment Shop. Its administrator, Justin Hall, explained: "All the book orders have been sent out using environmentally-aware packaging pretty much since day one. Cardboard boxes and cardboard book packages are used with bio-degradable filler chips, if required, for larger orders.

"This loose fill is produced from wheat or vegetable starch. The chips resemble traditional polystyrene packing but are far better for the environment than their polystyrene counterpart. This biodegradable loose fill is odourless, dust free, biodegradable, compostable, reusable or disposable.

"The only thing I use that isn't recyclable currently is the tape used to stick the boxes together, but I'm working on that one. We all need to be doing our bit to reduce how much plastic we use, for everyone's sake," Justin added.



# News

## College stalwarts honoured by ABDO



Angela McNamee receiving her award from ABDO president Clive Marchant

ABDO College chairman Angela McNamee and Professor Kate Springett have been honoured by ABDO to celebrate their service to the dispensing profession and the College.

In presenting Life Membership of ABDO, the board particularly recognised Angela for her service as a trustee and chairman of the College. The Life Membership award highlights the board's 'warm appreciation of the major contribution that Angela has made to the Association and to the dispensing profession over many years.'

The award also recognised Angela's 'enormous contribution and dedication'

to the Association as an ABDO dispensing theory and practical examiner and as a valued member of the contact lens practical examining committee.

"Your contribution to the MECS for CLOs project, and representing the profession on a number of committees, are greatly appreciated," the award citation read.

"Your wise counsel in helping colleagues and friends in optics stands recorded for all to see," it concluded.

Angela commented: "When I embarked on my ophthalmic dispensing course as a shy teenager, all those years ago, I could never have imagined the shape and direction that both my working and professional life would take as a result.

be receiving this award. Professor Springett, former head of the School of Allied Health Professions at Canterbury Christ Church University (CCCU) was awarded Honorary Fellowship at a dinner of the Association board and trustees in London on 24 July.

The Fellowship emphasised her 'enormous contribution and dedication to optical education' through her work pioneering the foundation degree and degree programmes using the collaboration between ABDO College and CCCU.

"Your assistance with upgrading the qualification and status of the teacher and tutors linked to ABDO College, and your expert knowledge and enthusiasm for research shared with all are greatly

---

**'I'm truly grateful, and I feel very proud and honoured.'**

---

"Through ABDO, I've gained highly respected qualifications, treasured friendships, and even a husband! The very special people whom I've met through ABDO have given me the confidence and self-belief to achieve so much in my lifetime. I'm truly grateful, and I feel very proud and honoured to

appreciated," the Fellowship award stated.

It concluded: "In awarding you Honorary Fellowship, the members of the ABDO board wish to place on record their warm appreciation of the major contribution which you have made to ABDO College, to the Association and to the dispensing profession over the last 13 years."

"I have found contributing to the DO profession's education development rewarding, challenging, worthwhile, and have become convinced of the centrality of eyesight to individuals' health, wellbeing and engagement within their community," said Professor Springett, who now works part-time in the CCCU Faculty of Health and Wellbeing.

---

## Share your story

**Do you have any tips you'd like to share with those following in your footsteps at the College? Is there anything you wish you'd known during your time there? Are you a graduate doing an interesting job now that would help inspire our students? If so, Re:View would like to hear from you. Please contact Antonia Chitty by emailing [achitty@abdocollege.org.uk](mailto:achitty@abdocollege.org.uk)**

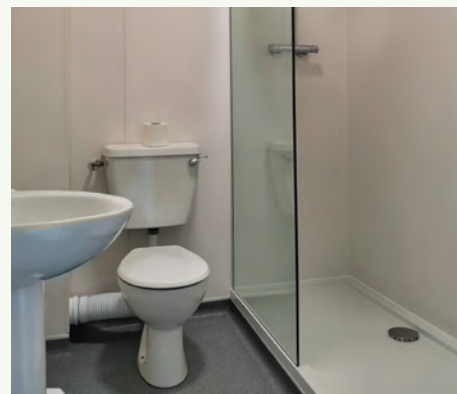
# News

## A view to the loos . . .

Work has successfully finished on the second phase of a long-term project to upgrade the facilities in the on-site student accommodation at ABDO College.

A third of the en suite bathrooms in the student accommodation were completely revamped in the summer holiday, with the work finishing on 19 July.

The latest phase of the improvement programme comes after the work over the Easter break when all 17 beds and mattresses in the student accommodation were replaced with new high quality products, with the old materials sent for recycling. The remaining bathrooms will be upgraded over the next two years.



## College's new Optical Assistant course begins

The new Optical Assistant course from ABDO College is starting this week, with over 50 students enrolled, more than double the initial target. The College will be running webinars for the first time for the new Optical Assistant course and the Senior Assistant course as well.

The Optical Assistant course was launched in May and was created for anyone who has just started working in optics, as well as those who have been

in practice for some time and want to formalise their knowledge.

The new course is repeated in January and offers the perfect way to combine study with a full-time job. It blends practical tasks with online modules and workshops and is open to all, regardless of prior qualifications. New workshops on repairs and pre-screening take place at ABDO's National Resource Centre in Birmingham. The workshops are

optional for those who want to develop pre-screening and repair skills in practice.

The Optical Assistant course provides a firm foundation for students to progress to the level 4 OA and OT courses and the ophthalmic dispensing courses. The course lasts 25 weeks and costs £795. The deadline for applications for the next course is 17 January 2020. Apply now at [www.abdocollege.org.uk](http://www.abdocollege.org.uk)



## Diary date reminder

The 2019 ABDO Graduation and Prize Giving Ceremony will be held on Wednesday 20 November at Canterbury Cathedral.

From mid-September onwards, graduands will receive an invitation email once they become eligible to attend. Due to high demand and capacity restrictions, extra tickets are not always available but once the invitations have been sent out, graduands will be told whether extra tickets may be on offer.

Guests to the ceremony are reminded that photography and video recording is strictly prohibited during the ceremony and within the cathedral at all times, including photography without the use of a flash. Doors to the cathedral will open for guests to enter at 6.30pm. If you require more information, please email Deanne Gray at [dgray@abdo.uk.com](mailto:dgray@abdo.uk.com)



# Contact lens block? Your questions answered

ABDO College technician Mark Turner FBDO and courses coordinator Gill Bickle FBDO CL answer your questions ahead of the block release course which starts next month.



## Is there anything I need to bring on my contact lens block and what do I do with my student voucher?

You should bring with you one pair of RGP contact lenses to your prescription, or plano if you have none, fitted by your optometrist or supervisor, with the fitting details BOZR (Back Optic Zone Radius) TD (Total Diameter) and BVP (Back Vertex Power). You will have these contact lenses put in your eyes by other students in a fitting lab exercise.

The vouchers are for soft contact lenses for your own personal use, or if you have no prescription, then for you to try on potential patients therefore order a common prescription, for example -2.00D.

**We only do our own brand of contact lenses in the practice. How would I find out about the other products available?**

On block release you will be given an *ACLM Handbook* from the Association of Contact Lens Manufacturers. It lists technical details for all the contact lenses, solutions and materials produced by ACLM member companies, and covers most of the products available in the UK. The handbook has become an essential product guide and a handy reference for contact lens practitioners. Some copies of the handbook will be available in the College Library too, offering all the details you would require.

## Is there anything else I could obtain to help further my studies?

You can become a member of the British Contact Lens Association (BCLA) as a student. The details for this are on the website [www.bcla.org.uk](http://www.bcla.org.uk). It is also worth looking up the main contact lens suppliers for videos and online support.

## What can I practise at work to help with the contact lens block?

There are practical tasks in the coursework to build the skills needed for block release which need to be all carried out under supervision. These are:

- The insertion and removal of contact lenses
- Use of the slit lamp and keratometer
- Observation of contact lens aftercare and fitting.

## Finally, *Re:View* asked Mark, in the run-up to Christmas, do the students get a chance to be festive while on block release?

Yes, the renowned College Christmas tree arrives the first week in December and is a popular backdrop for student selfies, which are a great memento of their time at the College and fun to look back on as their career progresses. The main question I get asked is how tall is the Christmas tree? According to Justin Hall who orders it, it is approximately 15ft tall, so definitely worthy of a picture or two.



# Overcoming personal challenges while studying

By Mark Nevey, FBDO

The pressures of studying can be challenging at the best of times and studying for the DO diploma or degree is no different, so when challenges present themselves in your personal life, it can make studying feel even harder. However, support is always at hand.

I experienced such a challenge first-hand when I undertook the second year of my DO diploma in September 2015 and my wife and I discovered that we were pregnant with our first child. Although good news, we both knew that it was going to be a challenge, but the course was already underway, and we knew that the qualification would ultimately benefit our family.

However, during the first few months of distance learning with ABDO College, I didn't anticipate how difficult the course would become. My second block release was my first indication of things to come when my wife was 32 weeks pregnant. I was very concerned about being a three-hour drive away from home for a whole two weeks, but the College lecturers were very supportive and understood that I might have to leave at any moment.

I discussed my situation with the College principal, Jo Underwood. My wife's due date was the day after my second-year theory exams, and it was clear to both myself and Jo that deferring my exams to the following November was the best option. This eased my stress in the months preceding and following the birth of our baby daughter.

Yet when it was time to embark upon my third block release, it was



Mark Nevey with his daughter Emma

hard to leave my new family for two weeks. It was like leaving my main source of support behind, although I found a different support network in my fellow students, many of whom were experiencing similar challenges.

## Motivation

In the remaining months of my DO diploma, my life became a juggling act. Between completing assignments, writing up case studies and revising for exams,

while working full-time and caring for our baby daughter, it almost seemed like an impossible challenge. One of my biggest motivations though was knowing that everything I was doing was for my family. While baby Emma presented me with unexpected challenges, as any new parent will know, she also inspired me. My wife was a wonderful support, giving me the time and space that I needed to study, while encouraging me on to succeed.

It's not always the case that family members understand what you're going through so it's essential that you are honest about the level of commitment the course requires, as well as the time and space that you need.

Another thing that kept me motivated was to keep my eyes on the final prize, including the title of FBDO, the position of dispensing optician, more opportunities for progression, better job security and the potential for a higher salary.

Other students have experienced similar challenges, one of those being Annica Clark who qualified as a dispensing optician in 2015 and is now co-owner of Clark Family Eyecare in Lincolnshire.

Annica was studying when she found out she was unexpectedly pregnant with her second child. Making sacrifices is a huge part of achieving success and for Annica, it was no different. She opted for only three months of maternity leave to enable her to press on with her studies and to log her required hours in practice.

As with myself, the main source of support that helped Annica through, came from her family. Working for her

mum was a huge bonus because she was allowed the time to study. She also benefitted from continuing encouragement from her mum and her boyfriend.

Annica highlights: "I'm pretty sure that if I hadn't been working with my family, I would have caved in and given it all up, but I had a tremendous amount of encouragement to help me through."

### **Collapse**

Health issues can also make studying even more challenging and for Fiona Mackay Gray, this was certainly the case. Fiona's health problems arose a few days after she completed the second block release of her second year. After collapsing at work, her doctor told her that her blood pressure was off the chart, and her heart rate was extremely high as well. She was blue-lighted to

overactive thyroid, resulting in memory problems through her third year.

Just like Annica, Fiona emphasises family support as quintessential to her studies. "My husband is my rock. If he hadn't cared for our boys the way he did, I could never have put in all the study time that I desperately needed to."

Another dispensing optician who came up against highly challenging health problems while studying, is Ashley Turner who qualified in 2012, after working in a couple of different practices.

Not long after completing her PQE exams, Ashley fell very ill with migraines and vomiting and was eventually diagnosed with an intracranial aneurysm. "My consultant told me that my chances of a full recovery were extremely high, due to my age," Ashley explains. "We discussed the surgery to

move forward with her aspirations and goals.

The worry and distraction of the original diagnosis made studying a huge feat while on the course, but Ashley took strength from her family and friends, and from the studying itself. "It gave me something to focus on and take my mind off of my health situation," she emphasised.

### **Sharing insight**

People who have experienced these kinds of challenges often have great advice to share. Annica advises students to not let anyone tell them that they can't achieve their goals, but also to be open about their feelings, seeking support when they're struggling.

Ashley recommends pushing on over the bumps in the road. She thinks that it is essential that students don't let any obstacles or challenges slow their momentum towards that final goal.

Fiona highlights the importance of setting aside enough time for study. However, she also advises that making time for fun is equally as important and personally, I have to agree with her. Down time is extremely important for rest and relaxation to recharge your batteries.

Many people come up against seemingly immovable obstacles, while trying to succeed in their career. However, it's essential to recognise that you are not alone in your struggles, and that there are always people to advise and support you, whether they be family, friends, fellow students or lecturers. Never be afraid to reach out for advice to help you achieve your goals.

## **'It's essential to recognise that you are not alone in your struggles.'**

the hospital where they started cardiac monitoring and put her on medication to ease the strain on her heart.

It was eventually discovered that the cause of the heart problem resulted from an overactive thyroid. The decision to remove her thyroid, as soon as possible, was the only option.

The effect of all the hospital time during Fiona's DO course was significant, since she had to defer her second-year exams. To make things even more challenging, Fiona developed Grave's disease as a direct consequence of the

have the aneurysm operated on, identifying all the ins and outs, including the need to have my head shaved."

But after discussion with her friends and family, Ashley decided to postpone the surgery until she had completed her DO course, a decision which was not taken lightly.

Fortunately, and unexpectedly for Ashley, just after qualifying as a dispensing optician, she discovered that the aneurysm had been misdiagnosed and that thankfully there was no need for surgery. This gave her the drive to



## Putting a career in the frame

In their final year, ABDO College degree students are all required to complete a dissertation which focuses on a research question of their choice. In this feature you can read about Eleanor Walker and her research paper, *'The effect of orthokeratology contact lenses for myopia control in children.'*

A lot of practitioners fall into a career in optics by a happy accident but for some like graduate Eleanor Walker, it's a natural progression from childhood, as she explains: "Having been reliant on spectacles since about the age of three, I have always been interested in optics."

Eleanor did a week of work experience at the independent practice where she was a patient and that strengthened her desire for a career in optics. In the summer before her A level results were due, fate intervened and a trainee dispensing optician position became available in a local independent practice and she started working at the practice.

She began the ABDO distance learning degree course in the September and worked for Susan R. Bowers Optometrists in Coventry for the first two years of her course, moving to Dr CP Grey Opticians in Stratford-upon-Avon for her final year.

### Friendships

Eleanor's initial experiences of ABDO College itself were on her first block release. "I stayed in the onsite accommodation which was great," she said. "I was able to form friendships with other students and most of them had worked in optics for several years, so I was able to learn lots from them too."



Eleanor Walker

Eleanor's favourite part of the course was the ray tracing through lenses and prisms as she found the maths side of the course easier to understand. "I also really enjoyed the contact lens module in year three as I could apply what I had learnt in practice," she added.

Her least favourite parts were the anatomy topics and modules and she found year two the hardest "due to the number of different modules covered and the amount of information required for the exams."

Eleanor had started collecting her case records and overcame the difficulties by making sure that she stayed ahead of the weekly assignments so that towards the end of the year she was able to spend more time revising and focusing on the topics she struggled with.

Her dissertation research was, 'The effect of orthokeratology contact lenses for myopia control in children.' "To be working in a profession that is now able to reduce myopia progression in our patients is amazing," she enthused.

"The hardest part of the project was filtering through all the academic articles and research to find the most reliable and credible," she revealed, continuing: "Once I had my few chosen articles, I used two academic dissertation books to help with the structure and content of my article."

Her research led her to the conclusion: "Orthokeratology contact lenses do slow the progression of myopia, however, more research is needed, with larger numbers of participants."

Eleanor is now working for Dr CP Grey Opticians managing the Chipping Campden practice and covering some of the clinics at the Stratford-upon-Avon practice.

Her advice for students following in her footsteps at ABDO College is: "Strive to keep on top of the assignments as trying to complete them the night before they are due causes unnecessary stress."

"Start your case records earlier, even if you just identify suitable patients, there is enough to worry about in year three without needing to find all 51," he concluded.

# The effect of orthokeratology contact lenses for myopia

By Eleanor Walker, BSc(Hons) FBDO

## INTRODUCTION

Myopia has rapidly become one of the most prevalent refractive disorders worldwide. It increases an individual's risk of developing potentially sight-threatening conditions, including myopic macular degeneration, retinal detachment and glaucoma, all of which can cause irreversible sight loss.

Myopia is usually caused by the axial length of the eye being too long, which means light rays focus at a point in front of the retina, therefore producing a blurred image. As children grow and develop, the axial length of the eye will continue to grow, meaning that if myopia starts to develop in early childhood, it can then progress to high myopia in adulthood.

One of the more modern methods used to slow myopia progression is orthokeratology (ortho-k) contact lenses. The rigid gas permeable (RGP) lenses are worn at night to reshape the cornea in order to temporarily alter the refractive error of the eye.

## METHOD

To start the research process, a spider diagram was used to generate three key search terms relating to the topic. These terms were then entered into various academic search engines which produced seven research papers. These papers were then rated against an inclusion/exclusion criterion table where only three met all the stated criteria.

## FINDINGS

Of the three studies reviewed, He *et al*'s study had the greatest number of participants. In total 271 patients were involved: 141 were assigned to the ortho-k group and the remaining 130 were assigned to the control group who wore single vision spectacles. The study by Zhu *et al* reviewed the records of 128 patients, 65 in the ortho-k group and 63 in the control group who continued to wear single vision spectacles. Swarbrick *et al* used a considerably smaller sample size of just 26 patients, all of whom wore an ortho-k lens in one eye and a conventional RGP lens in the other eye.

In all three studies, the age inclusion criteria and mean age of the participants were stated.

Swarbrick *et al* had the highest mean age of the studies used, whereas the mean age of the studies conducted by Zhu *et al* and He *et al* were slightly lower.

Each study measured the axial length before contact lens wear commenced and again at the follow-up appointments. In each study this was measured in millimetres (mm) and was then given as a p-value. If a p-value of less than 0.05 is found, it means that if the study were to be repeated, it is likely that the same results would be achieved therefore making it statistically significant.

Swarbrick *et al* found after six months the axial length of the ortho-k eye had shown no change:  $-0.02 \pm 0.5\text{mm}$ ,  $p=0.888$ . At the 12-month mark, there was still no change detected in the ortho-k eye:  $-0.04 \pm 0.08\text{mm}$ ,  $p=0.218$ . Due to the high p-values produced, these results are not significant and therefore not reliable.

The follow-up period for the second study, Zhu *et al*, was longer. After 12 months the researchers reported that in their ortho-k group the axial length had changed by  $0.16 \pm 0.17\text{mm}$ . A further set of measurements were taken after 24 months where the axial length of the ortho-k group was found to be  $0.34 \pm 0.29\text{mm}$ . Both sets of results were deemed significant due to the p-value of  $p < 0.001$ .

He *et al* conducted their follow-up examination 12 months after the study was started. The researchers found that the average axial elongation in the ortho-k group was  $0.27 \pm 0.17\text{mm}$ ,  $p < 0.001$ .

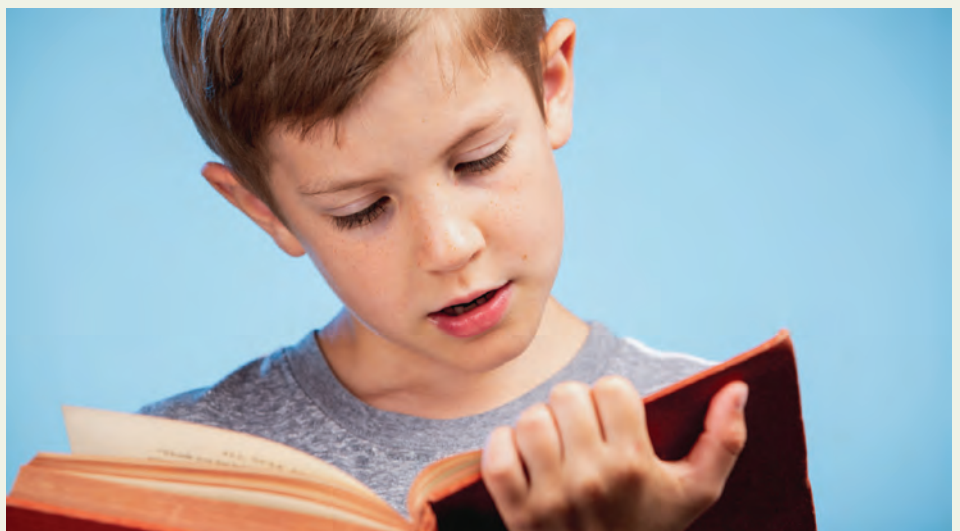
## DISCUSSIONS

Initially the sample size of participants used in the research was considered. There is no minimum number of participants required for a quantitative study, however, using a larger sample size would more accurately represent the population. With this in mind, the results produced from the study by He *et al* would be deemed more reliable than the other two studies.

Each of the studies gained approval from the necessary ethical committees before commencing and written consent was given by all participants. This was collected after they had been fully informed of the risks and benefits associated with the investigations.

The participants used in the studies were either from China or Eastern Asia, therefore an element of geographical bias was produced. It is important that further studies are completed using participants from other ethnic backgrounds.

The main data recorded and collected in each study was the axial length. The piece of



# control in children

equipment used was the same in all three studies: IOLMaster (Zeiss), a non contact optical biometric instrument.

He *et al* reported that the same examiner operated the IOLMaster at each of the patient's appointments. Swarbrick *et al* and Zhu *et al* did not disclose whether the same examiner took every set of measurements. If a different person measures the axial length at each appointment, user error may occur, therefore making the results unreliable.

Once the axial measurements had been taken, the differences between the values needed to be calculated and compared. In each of the three studies analysed, the same method was used: a paired t-test with Bonferroni correction. Zhu *et al* and Swarbrick *et al* both reported that, if there were significant differences found between the measurements, a paired t-test with Bonferroni correction was used, whereas He *et al* used this method to compare the differences between the two control groups.

None of the studies considered other factors which may affect myopia progression, such as pupil size, accommodative lag and a history of parental myopia. In future studies it would be beneficial if these factors were recorded.

## CONCLUSION

While there are limitations to the three studies reviewed, they all found the same results: that ortho-k contact lenses slowed down the progression of myopia. As the studies discussed involved a control group, it was also shown that ortho-k lenses were more effective in slowing the progression of myopia than traditional GP contact lenses and single vision spectacles.

Even though the equipment used to measure the axial length of participants was the same in all three studies, the conditions in which it was used were not. It is important to disclose specific information, such as if the same operator conducted the measurements each time to ensure the chance of bias results are minimised.

Further research would be needed using larger sample sizes and children from mixed ethnic groups in order to produce reliable results.

## REFERENCES

- Bowling A and Ebrahim S. 2005. *Handbook of health research methods – investigation, measurement and analysis*. Berkshire: Open University Press.
- Foster P J and Jiang Y. 2014. Epidemiology of myopia, *Eye*, 28(2), pp 202–208. doi: 10.1038/eye.2013.280. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3930282/> (accessed 17 April 2018).
- Francis J J, Johnson M, Robertson C, Glidewell L, Entwistle V, Eccles M P and Grimshaw J M. 2010. What is adequate sample size? Operationalising data saturation for theory-based interview studies, *Psychology and Health*, 25(10), pp 1229–1245. doi: 10.1080/08870440903194015. Available from <http://openaccess.city.ac.uk/1732/1/What%20is%20an%20adequate%20sample%20size.pdf> (accessed 3 May 2018).
- Goodman S. 2008. A dirty dozen: twelve p=value misconceptions, *Seminars in Hematology*, 45(3), pp 135–140. doi: 10.1053/j.seminhematol.2008.04.003. Available from <http://www.perfendo.org/docs/BayesProbability/twelvePvaluemisconceptions.pdf> (accessed 29 April 2018).
- He M, Du Y, Liu Q, Red C, Liu J, Wang Q, Li L and Yu J. 2016. Effects of orthokeratology on the progression of low to moderate myopia in Chinese children, *BMC Ophthalmology*, 16(1), pp 126–134. doi: 10.1186/s12886-016-0302-5. Available from <https://bmcophthalmol.biomedcentral.com/articles/10.1186/s12886-016-0302-5> (accessed 23 April).
- Holden B A, Fricke T R, Wilson D A, Jong M, Naidoo K S, Sankaridurg P, Wong T Y, Naduvilath T J and Resnikoff S. 2016. Global prevalence of myopia and high myopia and temporal trends from 2000 through 2050, *Ophthalmology*, 123(5), pp 1036–1042. doi: 10.1016/j.optha.2016.01.006. Available from <https://www.sciencedirect.com/science/article/pii/S0161642016000257> (accessed 18 April 2018).
- Holden B, Sankaridurg P, Smith E, Tallor T, Jong M and He M. 2014. Myopia, an underrated global challenge to vision: where the current data takes us on myopia control, *Eye*, 28(2), pp 142–146. doi: 10.1038/eye.2013.256. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3930268/> (accessed 18 April 2018).
- Morgan I G, Ohno-Matsui K and Saw S-M. 2012. Myopia, *The Lancet*, 379(9827), pp 1739–1748. doi: 10.1016/S0140-6736(12)60272-4. Available from <https://www.sciencedirect.com/science/article/pii/S0140673612602724> (accessed 18 April 2018).
- Spieth P M, Kubasch A S, Penzun A I, Illigens B, M-W, Barlinn K and Seipmann T. 2016. Randomized controlled trials – a matter of design, *Neuropsychiatric Disease and Treatment*, 12, pp 1371–1349. doi: 10.2147/NDT.S101938. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4910682/> (accessed 2 May 2018).
- Sun Y Xu F, Zang T, Liu M, Wang D, Chen Y and Liu Q. 2015. Orthokeratology to control myopia progression: a meta-analysis, *PLoS One*, 10(4), e0130646. doi: 10.1371/journal.pone.0124535. Available from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124535> (accessed 14 April 2018).
- Swarbrick H A, Alharbi A, Watt K, Lum E and Kang T. 2015. Myopia control during orthokeratology lens wear in children using a novel study design, *Ophthalmology*, 122(3), pp 620–630. doi: 10.1016/j.opth.2014.09.028. Available from [http://www.genevaeyecare.com/uploads/4/1/3/1/41314133/myopia\\_control\\_through\\_ortho-k.pdf](http://www.genevaeyecare.com/uploads/4/1/3/1/41314133/myopia_control_through_ortho-k.pdf) (accessed 18 April 2018).
- Wasserstein R L and Lazar N. 2016. The ASA's statement on p-values: context, process and purpose, *The American Statistician*, 70(2), pp 129–133. doi: 10.1080/00031305.2016.1154108. Available from <https://www.tandfonline.com/doi/full/10.1080/00031305.2016.1154108> (accessed 29 April 2018).
- Zhu M-J, Feng H-Y, He X-G, Zou H-D and Zhu J-F. 2014. The control effect of orthokeratology on axial length elongation in Chinese children with myopia, *BMC Ophthalmology*, 14(1), pp 141–150. doi: 10.1186/1471-2415-14-141. Available from <https://bmcophthalmol.biomedcentral.com/articles/10.1186/1471-2415-14-141> (accessed 19 April 2018).



# So you don't think you have any low vision patients in

By Gillian Smith BSc(Hons) FBDO (Hons) SLD (Hons) LVA Cert Ed



As a qualified and registered dispensing optician, you are in the privileged position to be able to help patients who are visually impaired. According to the *Optician's Act 1989 (The Sale of Optical Appliances)*, the dispensing of spectacles to patients who are registered as blind or partially sighted, or children under the age of 16, must be carried out by a registered dispensing optician or optometrist. It states that the restriction also includes 'restricted low vision aids.'

## Core competency

Low vision is one of the nine core competencies specified by the GOC. It is examined in unit 10, a written examination in the Diploma in Ophthalmic Dispensing Syllabus, 2015. It is also examined in unit 12, the practical Final Qualifying Examination (FQE), in section C – prescription analysis (viva) and section D, ocular abnormalities and special optical appliances (stations exam).

By the end of the final year of study, ABDO College diploma students must produce 51 case records for their PQP folder, five of which must be case studies for low vision (LV) patients, at least two of which must be actual dispensings of low vision aids (LVAs).

The Low Vision Honours Course is a specialist low vision course leading to the FBDO (Hons) LV qualification for those qualified and registered practitioners who wish to expand their expertise in the practise of low vision. The course attracts registered dispensing opticians, optometrists and orthoptists.

Those studying for the Low Vision (Hons) qualification must produce comprehensive case studies for 15 low vision patients, comprising of an initial assessment and at least one follow up appointment for each patient after an interval of at least three months, before being eligible to sit the LV (Hons) practical examination. A mix of pathologies and patient ages should be covered.

You may well be asking yourself, why the study of low vision is so important in daily practice if you don't actually see many low vision patients? According to Vision 2020, an ageing world population will inevitably lead to increased age-related sight loss. However, visual impairment and low vision are not restricted to the elderly.

## So what is a low vision patient?

A low vision patient does not have to be certified and registered as Severely Sight Impaired (SSI)/Blind, or Sight Impaired (SI)/Partially Sighted. Low vision is defined in many ways by the different organisations

that have an interest in it. There is no legal definition of low vision. The Low Vision Services Consensus Group, 1999, defines low vision as "a visual impairment which cannot be fully corrected by conventional spectacles, contact lenses or medical intervention and which causes a restriction in that person's daily life."

The WHO definition is similar but includes field of view. It is worth remembering that a patient with very good central vision, but with a gross peripheral field loss, will be very disabled. If you're not convinced, find an empty toilet roll or tube, close one eye and put the tube right up to the other eye in contact with the face and brow, now try to navigate around your home or work, not as easy as you might have thought is it?

## Pathologies causing low vision

Figures show that the main causes of certification for SSI (blindness) and SI (partial sight) are age-related macular degeneration, glaucoma, diabetic retinopathy, hereditary retinal disorders, optic atrophy and cerebro vascular disease.

Look beyond the common eye pathologies, think laterally and remember that many family members may be affected by the same eye condition, so thorough history-taking will be beneficial in many ways.

Inherited conditions which result in low vision include albinism, aniridia, Best's disease, cataract, including inoperable and congenital cataract, coloboma, Reis Buckler's dystrophy and Fuch's endothelial dystrophy – both corneal dystrophies, Marfan's syndrome and

# your practice?

microphthalmos (associated with congenital rubella).

Dystrophies which affect the macula include retinopathy of prematurity, Best's disease, Stargardt's disease, retinitis pigmentosa, Usher syndrome and Leber's syndrome. Other pathologies resulting in low vision include diabetes (retinopathy may not be stated on the patient record), nystagmus and pathological axial myopia. Stroke patients are often visually impaired by field loss made worse by additional disabilities.

## Identifying low vision patients

Research shows that many people fail to identify that they have low vision. Whether it is five or 15 patients you need to find, working in practice offers you a ready patient base, you just need to identify prospective patients and it's never too early to start the process.

Many strategies can be used. Importantly, talk to your receptionist, or the person who normally books patients in. Make a list of the pathologies that you would like to identify so that you can be alerted if patient records indicate they are coming in for an appointment, perhaps make it a formal list to complete, with headings for pathology, the patient's name and the date they are attending.

Ask your optometrist if they can alert you to patients, or divert patients to you, who have reduced visual acuities (VAs) or a pathology which may result in visual impairment. Don't forget to talk to your CLO or optometrist as LV patients also wear contact lenses. Why not make a daily list of patients, recording their pathology and VA for yourself? This is

always a good starting point. Always remember that you may have family members or friends who could potentially form part of your patient base.

## Further afield

Registered practitioners studying for the LV (Hons) Course can already dispense low vision patients. The provision of LV services varies across the UK and you should become familiar with those who provide low vision services in your area and with local requirements. Contacting your Local Optical Committee (LOC) or Local Optical Committee Support Unit (LOCSU) is a must. Currently it is very difficult for dispensing opticians to find a new placement as a low vision practitioner in the Hospital Eye Service.

Research support societies in your area. You could offer to do some talks, or free assessment sessions for them which will help you to make some relevant contacts. Why not get in touch with your local GP practice and explain that you are studying for a specialist low vision qualification and see whether they may be interested in you coming to talk to patients? Or, again, offer a free assessment session and see where it may lead. The same strategy could also be applied to local care homes.

Are there any special schools in your area? The framework for proposed

Special Schools Services advocates that dispensing to children and young adults should be offered within the school environment. You could also consider developing a private specialist low vision practice which would give patients greater choice and improved access to low vision provision. With an overstretched NHS, recall times are often poorly adhered to, with some patients lost in the system. An advantage within practice is that patient reminders and recalls are easier to manage.

It is essential to remember that all your interactions must adhere to the GOC Standards of Practice, ABDO guidelines and the General Data Protection Regulations (GDPR).

## Conclusion

The effects of low vision can result in depression, isolation and loss of self-esteem. In children it can also impede social development and educational outcomes, leading to increased social isolation. Effective identification of those affected by low vision and appropriate intervention and support of patients can only result in better provision of care. If patients fail to recognise that they have low vision, it is essential that we as professionals do not fail them.

<https://abdocollege.org.uk/references/>

## About the author

**Gillian Smith is ABDO College's senior lecturer and lead lecturer in low vision and anatomy, ABDO practical examiner (Diploma and Low Vision (Hons)), and principal examiner in ophthalmic dispensing theory and associate lecturer at Canterbury Christ Church University.**

## Getting sporty for charity



ABDO College students and staff held a fun and energetic decathlon at Godmersham and raised £2,846 for the charity, Vision Care for Homeless People, enough to fund a clinic for five months.

Students created three teams, 'Friends of Facial Furniture,' 'The Protect Plus Blue Team,' and 'The 515 Crew,' with College staff making up the fourth team. The event was won by a narrow margin by the 'Friends of Facial Furniture'. The top raffle prize of a visit to the Eyecare 2020 conference was won by student Dilbir Dhariwal.

Funds were raised by entry tickets, which included a raffle ticket, a drink and a burger or hotdog, along with

generous sponsorship from 10 optical companies. The events were named in honour of the sponsors and included the Essilor Eyezen Start Sprint 100m, the Haag-Streit Low Vision Relay, the Mac & Pure Eyewear Wheelbarrow Race and the Stepper Sack Race. There was also Millmead Wellie Wanging, the Topcon 3-Legged Race, a Bondeye Egg and Spoon Race plus a Caledonian Optical Target Shoot Out and the Seiko Vision Sponge



Relay, with the Thomson Tug of War as the finale.

ABDO College technician Mark Turner organised the event. "It was great to get such support from the industry sponsors, staff and students for such a good cause," he said.

Vision Care for Homeless People provides ocular health screening and spectacles to homeless and vulnerable people in the UK. The charity's chair, Elaine Styles, presented certificates to the winners of each race. "We all appreciate the time, effort and energy Mark and his team at ABDO College devoted to organising this event and want to say a big thank you to our sponsors for their generous support," said Elaine.





# Justin Hall interview

The ABDO College Book and Equipment Shop sells thousands of books and useful equipment items each year to dispensing students and to those studying ophthalmology and optometry. In this article, find out more about the shop's administrator, Justin Hall, and his role.

## What does your role entail?

I am the sole point of contact for all orders, whether by phone, email or any other way. I will then produce an invoice or quote for the order and package any that are ready for dispatch. I am also responsible for stock and credit control. In slightly quieter times I research into any new titles that would benefit customers. The Book and Equipment Shop also sells items to universities and other colleges, not only in the UK, but in Australia, Malaysia, America, Canada, China and many, many other countries, pretty much all over the world in fact! I am also responsible for looking after the College building and arranging any maintenance etc, so I'm kept pretty busy.

## When did you start at the College?

I started work in September 2001 but not in the shop, in the College's courses department. When the shop's administrator left, the opportunity came up to take over, so I applied for the job and I started work in mid-2002.

## What do you enjoy about your role?

I really enjoy the freedom of the job. I have bosses to answer to but day to day it's just me solely responsible for running the shop. It's isolated too in a quiet part of the College and I quite like that.

I like my own company as I'm a quiet person by nature, so the role suits me well.

## What are the challenges of your job?

At busy times it's hard work, but it does even out throughout the year. The shop's busiest months are July, August, September and October. When the courses start in September, it does get challenging though, as it's ABDO College students, plus those everywhere else as well, wanting books and equipment. Sometimes I get people ringing up after just a few hours asking where their order is, but the College reception team all get involved with big mailouts at busy times and we get everything dispatched as fast as possible.

## What were your jobs before joining the College?

When I left school, I joined the Post Office as my father was a postman for 25 years and my brother was also a postman. I spent six years at the Post Office and then joined a tool hire company delivering building equipment for six years.

## What are your most common queries?

I get a lot of queries about management books but there isn't a definitive one available. There are a lot of management books out there but not any specific to



the optical industry. I must get asked that each week.

A more everyday query is for a basic dispensing book, but I can't do that as dispensing isn't basic! I therefore tend to push people towards the *ABDO College essential reading set* books and the ABDO publications, *Essentials of dispensing* by AH Tunncliffe and *Practical dispensing* by A Griffiths. I also recommend *Practical optical dispensing* by David Wilson and Steven Daras.

## What are the most popular items sold by the College bookshop?

The most popular book for practitioners is *Ophthalmic Lenses Availability*. For optical students, it's the problem-solving titles covering practice essentials, especially the dispensing principles, plus the core text books they need for their course.

We also sell a lot of the Fairbanks Facial Gauge used for taking facial measurements. The Fairbanks Datum Rule is surprisingly still quite popular, even though the measurement is now technically obsolete. The most popular item we sell through the shop is the ABDO Frame Rule.

## What changes have you seen during your time in the role?

I'm receiving more orders on the website now as people are using the internet much more than when I started. Now around 85 per cent of my orders are via the website. Visit the College shop at [www.abdocollege.org.uk/bookshop/](http://www.abdocollege.org.uk/bookshop/)

# ABDO College Book and Equipment Shop

Make ABDO College your first choice for competitively priced:

- Rules, gauges and charts
- Dispensing, optometry, ophthalmology, contact lens books
- Essential packs of books for student DOs
- Useful study guides

Order online at  
[abdocollege.org.uk/bookshop/](http://abdocollege.org.uk/bookshop/)

Email [jhall@abdocollege.org.uk](mailto:jhall@abdocollege.org.uk) or telephone 01227 733904 to place an order or to source further optical books and equipment not listed in the store.

