

The new series of public events for the 2017-2018 seasons had a good start with an event in the City, University of London. It was organised by Dr Catherine Suttle, School of Optometry and Visual Science and was entitled Colour Vision Assessment and the Use of Colour in Clinical Practice.

This seminar focused on the use of colour for prevention and treatment of conditions encountered by the eye care practitioner. Various topics were discussed amongst which were the use of coloured overlays and lenses for reading difficulty, and the use of short wavelength filters. Both of these interventions are widely applied in practice yet both are controversial.

In the first part of the seminar *Colour Vision Assessment* there were four speakers. First one, **Kathryn Albany-Ward**, in her talk **Colour vision screening in schools**, she concentrated on the implications of the current colour vision screening environment following removal of school screening from the Healthy Child Screening Programme in 2009. She posed an important question: how optometric practice can improve the current situation.

Next speaker in this section was **Prof John Barbur** and in **Colour assessment, isolation of colour signals** he discussed the problems associated with the most common methods for assessing colour vision and presented data that described variability in normal trichromats and those with congenital deficiency. The use of age specific limits of normal trichromatic colour vision will be discussed in relation to detection of acquired loss of chromatic sensitivity. In this context the results of extensive, clinical studies designed to detect the earliest changes in colour vision in diabetes was also be presented.

Some of the data presented by Prof Barbur was further discussed in the talk of **Dr Marisa Rodrigez-Carmona - When, how and why to assess colour vision in practice** where she described why minimum colour vision requirements have been introduced within occupations, how colour vision is assessed using occupational colour screening tests and the statistical outcomes of such tests.

Colour Vision Assessment part of the seminar ended with the talk of **Dr Roopa Vemala - Detection of early loss of colour vision in age-related macular degeneration (AMD) – with emphasis on drusen and reticular pseudodrusen**. This work assessed and graded the loss of chromatic sensitivity in patients with Age-related Macular Degeneration (AMD) and investigated whether the severity of colour vision loss can be used to discriminate various stages of AMD. The conclusion from the study was that although cone photoreceptors may remain relatively unaffected in early and intermediate stages of AMD, the processing of cone signals in the retina can, however, be heavily disrupted with subsequent loss of both YB and RG chromatic sensitivity.

After the break, in the second part of the seminar, *The Use of Colour in Clinical Practice*, **Dr Catherine Suttle** discussed the likelihood of the effects of visual distress to be alleviated by the use of specifically coloured lenses and overlays, designed to suit the needs of each individual in her study **Coloured overlays and precision tinted lenses – is colour choice repeatable?** The conclusion of the enquiry

into this question concluded that the colour of the lenses that provides maximum comfort does not stay consistent as there are variations depending on the occasion.

Next presentation was that of **Prof Arnold Wilkins**. He examined the results of two studies in which patients underwent assessments with the Intuitive Colorimeter in his talk **On the reliability of colorimetry**. The colorimeters used, the methods employed, the interval between examinations, and the masking of patients and examiners differed. Nevertheless both studies show similar reliability of the assessments and the discussion was centred on the implications of these findings for the precision necessary when prescribing coloured filters.

The last talk **Blue light filters and their use in ophthalmic practice** was presented by **Prof John Lawrenson**. He presented the results of the systematic review of an investigation into the relative benefits and potential harms of Blue-Blocking (BB) spectacle lenses which attenuate short-wavelength light. The conclusion that the study presented was that there is a lack of high quality evidence to support using BB spectacle lenses for the general population.

Throughout the seminar each talk was followed by a Q&A. However to **satisfy** the interest of the audience to the different aspects of assessment of colour vision and of the use of colour to enhance performance or correct existing conditions in the clinical practice the organisers offered a short but intense Discussion session, led by **Dr Catherine Suttle**.