Five recent findings from optometry doctorates that every optometrist should know

Bruce JW Evans, Peter Campbell, Adrian C Chorley, Louise Gow, Paul Grace, Claudia Ashleigh, Tony Redmond, Rishi Agarwal, Martin J Benwell, David F Edgar, Judith Morris

Introduction

The Institute of Optometry in London runs, jointly with London South Bank University, a professional doctorate in optometry. In recent years, 10 of these Dr Optometry degrees have been awarded (and one transferred to a PhD). This presentation summarises the first 5 theses to highlight important findings relevant to practising optometrists.

ACA assessment - Dr Peter Campbell

Advisers: Tony Redmond, Rishi Agarwal, Bruce Evans
Outcome: 1. Optometrists can become skilled at gonioscopy.
2. Intra-observer repeatability is better for van Herick than gonioscopy.
3. Van Herick may be more sensitive than OCT at detecting narrow angles.

Campbell et al. (2015)

UV hazard for pilots - Dr Adrian Chorley

Advisers: Martin Benwell, Bruce Evans
Outcome: 1. Pilots are often unaware of the UV hazard.
2. Survey of 2917 pilots found barriers to sunglass use.
3. Most aircraft assessed had poor UVA blocking windshields which resulted in ocular exposure in excess of international guidelines (up to between 4.5 to 6.5 times greater during one flight).
4. In addition to existing standards for UV protection, an additional requirement of less than 10% transmittance at 380 nm is recommended.


Children with autism & eye exams - Dr Louise Gow

Advisers: Martin Benwell, Bruce Evans
2. The autistic child needs to feel in control.
3. Prepare the child, parent, & optometrist.
4. Present equipment as “gadgets”.

Gow (2015)

OCT online training - Dr Paul Grace

Advisers: David Edgar, Bruce Evans
Outcome: 1. An OCT online interactive training algorithm (OCTAID) is more successful at training OCT skills than conventional approaches.
2. OCTAID is associated with an improvement in the combined skill of OCT scan recognition and selecting appropriate patient management.

Grace (2017)

RCT multifocal soft lenses - Dr Claudia Ashleigh

Advisers: Judith Morris, Bruce Evans
Outcome: 1. Air Optix Aqua and Biofinity multifocals performed similarly for: D & N VA, CS (mesopic & photopic), stereoacuity.
2. Subjective preference for Air Optix for DV and Biofinity for IV/NV.
3. 75% found MF CL to be a good alternative to spectacles.
4. 58% still wearing after 1y.

Ashleigh (2017)

Conclusions

Everyday optometric activities often lack a sound evidence-base (Evans & Rowe, 2018). There is a need for more engagement with clinical research by community optometrists. Part-time professional doctorates offer an accessible way to advance the individual and the profession, and fill evidence gaps in clinical practice.

(References at www.bruce-evans.co.uk)