

Optometrists in Singapore are helping "dyslexic" children. They may prescribe eye exercises or glasses if the child has vision problems, but a regular eye examination may not suffice. Research by the British Medical Research Council (MRC) confirms the need for a series of specialized tests to pick up an underlying condition that can affect reading.

An expert panel were invited by the People's Association to speak on the topic "Vision and Learning".

Vision-related problems affect 10 percent of children who struggle to read. One possible cause is Visual Stress - a photosensitive condition that affects the visual cortex and hinders reading. It is also known as "Meares-Irlen syndrome". The research showed that lenses can be carefully tinted to a precise colour to help alleviate the symptoms that derives from hyper-excitability of neurons in the brain.

This is new to people in Singapore, but these lenses have been used worldwide since 1990s. Today, in excess of 500 British community optometrists and hospitals prescribe precision coloured lenses using an Intuitive Colorimeter to accurately measure the optimum coloured filter. It may also be useful for people suffering from photosensitive migraines and photosensitive epilepsy.

The foremost expert in this field, Professor Bruce Evans, was in Singapore recently. He is the Director of Research at the UK Institute of Optometry and a Professor at City University London. The other speakers are Ms Christine Fitzmaurice, spokesperson from the International Institute of Colorimetry and Mr Yap Tiong Peng from IGARD Group.

Trained in the UK, Mr Yap has been prescribing the coloured filters to a very particular group of dyslexic children who suffer from visual stress. Some of them may report the words moving or shimmering on the page. It can also occur in children who are not dyslexic. He said, "Problems with the eyesight is not the cause of dyslexia, but certain visual problems occur more often in dyslexia and these may contribute to the reading difficulty".

Professor Evans revealed that nearly 40-50 percent of people who have dyslexia have visual stress.

"Not all dyslexic people have these visual problems, but some have visual anomalies without realizing it. And, not everyone requires coloured filters", revealed Mr Yap. He said that dyslexia is best tested by a registered educational psychologist or a specialist teacher, but it is vital that anyone

who struggles to read should also undergo full vision testing, including functional tests in Binocular Vision and Visual Stress".

According to Ms Fitzmaurice, the diagnostic process of identification of Visual Stress will not normally be picked up in a general eye examination, but will certainly be identified by a paediatric or community optometrist who deals with learning-related vision problem and who is trained to diagnose Visual Stress.

The most common visual problems in dyslexia are the reduced ability to focus close up and a poor or unstable coordination of the two eyes. Hence, there is a series of specialised tests for detecting the problems in Binocular Vision and also Visual Stress.

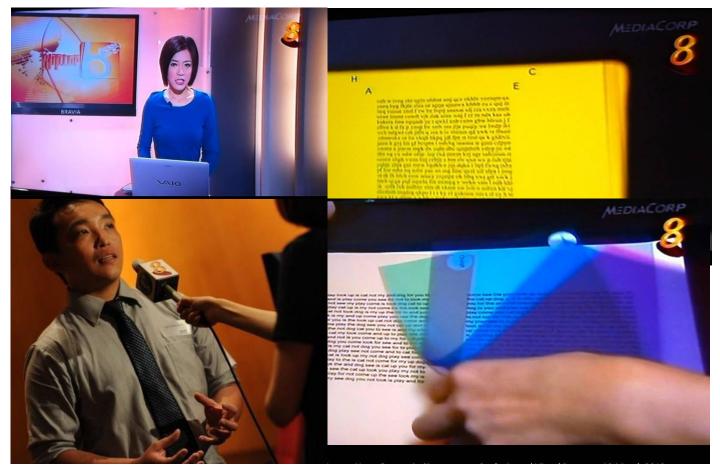
Mild visual distortions arising from the conditions may slow reading and may also discourage children from prolonged reading. Even good readers and those with "mild" learning difficulties can also unknowingly suffer from Visual Stress. In the run-up to school exams, they may complain of headaches, eyestrain or discomfort when coping with a volume of reading.

## Channel News Asia Interview on Dyslexia and Vision - 3 March 2012



Mediacorp Channel 8 News on Meares Irlen Syndrome – 18 March 2013





Mediacorp Channel 8 Interview on prescribing colour lenses 18 March 2012



Singapore Seminar on Vision and Learning by Professor Bruce Evans (UK Institute of Optometry and City University, London), Yap Tiong Peng (IGARD Group, Singapore) and Christine Fitzmaurice (International Institute of Colorimetry).

Organised by the People's Association and Distinguished Universities Alumni League