

## New study finds short-sightedness is becoming more common across Europe

Myopia or short-sightedness is becoming more common across Europe, according to a new study. The meta-analysis of findings from 15 studies by the European Eye Epidemiology (E<sup>3</sup>) Consortium found that around a quarter of the European population is short-sighted but it is nearly twice as common in younger people, with almost half (47 per cent) of the group aged between 25 and 29 years affected. Individuals of the same age born more recently had higher levels of myopia; overall myopia levels increased by approximately a third (18% to 24%) in those born after 1940 compared to those born prior to 1940.

The analysis of studies covering over 60,000 people also found a strong link between myopia and level of education, with myopia levels in those completing higher education approximately double those in people educated to primary school level. Researchers suggest that factors relating to the nature of modern education such as more time devoted to studying and working with computers and less time spent outside may help to explain the correlation between short-sightedness and education levels.

However, while younger generations tend to have spent more time in education, this did not fully explain why myopia is becoming more common. A number of factors increase the risk for being short-sighted including a family history of myopia, while other modern lifestyle factors may also help to explain the trends identified in this study.

Myopia generally develops during childhood and adolescence. There is 'elongation of the eye' which results in the light being focused in front of the retina, causing blurred vision that has to be corrected by glasses, contact lenses or laser eye surgery. High myopia additionally carries a risk of sight-threatening conditions such as retinal detachment, glaucoma and retinal degeneration.

The general rise in short-sightedness, including in a sizeable proportion of the working age population, has implications for both the health care system and the economy, conclude the authors of the study.

Katie Williams, first author from the Department of Ophthalmology at King's College London, said: 'We knew myopia was becoming more common in certain parts of the world – almost 8 in 10 young people are affected in urban East Asia – but it is very interesting to find that the same pattern is being seen here in Europe. This has major implications for the future burden from this eye disease which can threaten sight in older age, particular in very short-sighted people.'

Professor Chris Hammond, senior author from the Department of Ophthalmology at King's College London, added: 'We do not fully understand the reasons for this shift, given that this study shows the rising levels of education are not solely to blame. More research is required to see if changing trends in childhood outdoor exposure, reading, and educational practices are affecting myopia development. While this study was on adults, we do not yet know the impact of the recent rapid rise in use of computers, tablets and mobile phones on visual development in children.'