



Mary Frances Cotch

Millions walking around with uncorrected vision

Devon Schuyler

MORE than one in 20 people in the US have poor vision for a simple reason: they don't wear the glasses or contact lenses they need.

Reviewing data on more than 13,000 people, researchers found that 6.4% had visual impairment and 5.3% had visual impairment due to uncorrected refractive error. This translates into 14 million and 11 million Americans, respectively.

vision impairment and nine per cent had visual impairment due to uncorrected refractive error.

In addition to teenagers, Dr Cotch said that the people who could most benefit from higher rates of using corrective lenses are those with diabetes, Hispanics, and those who are economically disadvantaged.

Vision that was 20/40 or better in the better-seeing eye was not considered to be impaired. Dr Cotch pointed out that although many people wouldn't be happy with 20/40 vision, it is good enough for people to obtain a driver's licence in most American states.

A total of 5.8% of the people in the study said that they wore corrective lenses but hadn't brought them along, so they were tested without them. Visual

2008 as part of the NHANES survey, so they'll be able to look at trends over time.

"This is a topic of great interest to the National Eye Institute, and we will be pursuing it," she said.

She said that the findings suggest that lack of access to healthcare and financial resources may prevent at least some people from getting the corrective lenses they need, but that there were likely other factors involved.

"We were very careful to make sure that we weren't telling people that they needed to get glasses and then they didn't have the wherewithal to get them. We were trying to make sure that adequate resources would be available," said Dr Cotch, who pointed out that the NEI website (www.nei.nih.gov/) contained links to organisations that can help provide financial resources to those who can't afford eyeglasses.

Sonal Rughani, an optometrist with the Service Development & Research Team of the Royal National Institute of the Blind in London, told *EuroTimes* that accurate assessments of how many people have uncorrected refractive error resulting in poor vision are needed in all developing and developed countries, including those in Europe.

"Only once the scale of the problem is identified in each country can strategies of accurate refraction and the provision of spectacles be implemented in a manner that is efficient," she said.

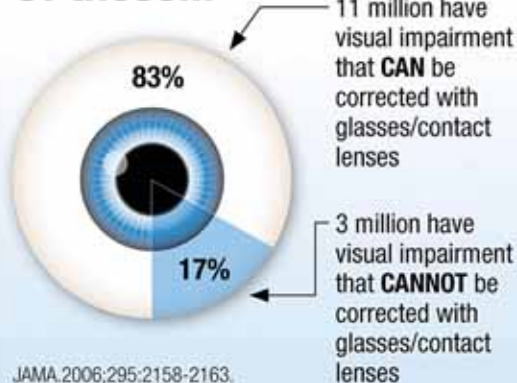
Miss Rughani proposed that future studies include children less than 12 years of age, because children with refractive error that goes uncorrected before the age of seven may develop amblyopia. This could result in poor vision from childhood.

"The number of 'visually impaired years' for that child are therefore much higher, and this will have a developmental, social and economic impact," she said.

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14 million people in the U.S. are visually impaired. Of these...



"We were surprised by just how many people were impaired. Eleven million people who are visually impaired wouldn't be if they wore proper eye glasses or contact lenses," said study researcher Mary Frances Cotch PhD in an interview with *EuroTimes*. Dr Cotch is chief of epidemiology at the National Eye Institute, National Institutes of Health, in Bethesda, Maryland.

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Dr Cotch said that she was especially surprised to see the high rate of uncorrected vision among teenagers. Of those aged 12 to 19 in the study, 9.7% had

First major study since mid-1970s

Dr Cotch explained that this was the first national study since the mid-1970s to explore the extent of visual impairment in the US. The results were based on data collected from 1999 to 2002 as part of

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the National Health and Nutrition Examination Survey (NHANES).

In NHANES, 13,265 participants aged 12 or older had their visual acuity assessed at a mobile examination centre while using their usual vision correction. People whose visual acuity was 20/50 or worse in the better-seeing eye were considered to have visual impairment. In those with visual impairment, the investigators determined whether corrective lenses would improve vision to 20/40 or better.

acuity was 20/40 or better in 71% of these people.

The researchers found that 1,190 of the participants had visual impairment, and that 83.3% of these could achieve good visual acuity with correction. Rates of

visual impairment were highest among people who were Hispanic, were poor, had diabetes, lacked private health insurance or had fewer years of education.

Dr Cotch said that the findings were comparable to reports from other countries, such as England and Australia.

Unclear why some people not wearing lenses

Dr Cotch said that she and her team would continue with the study through