Low attendance to diabetic retinopathy screening in young people in England.

Maria Carolina Ibanez Bruron; Ameenat Lola Solebo; Phillipa Cumberland; Jugnoo Rahi

Investigative Ophthalmology & Visual Science July 2019, Vol.60, 1093. doi:

Abstract

**Purpose:** Periodic retinal examination is recommended in people living with diabetes. In the UK, diabetic eye screening is delivered by local screening programs, which are run independently of pediatric diabetes care. Annual attendance to diabetic eye screening among eligible children according to the UK guidelines, i.e. children aged 12 years old or older, is currently unknown. We aim to determine annual diabetic eye screening uptake in children and young people between 12 and 25 years and explore its associations with socio-demographics factors.

**Methods:** Extraction of anonymized data of children and young people between 12 and 25 years old registered in participating diabetic eye screening programs (DESPs). Annual uptake was calculated using data from two audit years (2014/2015; 2015/2016). Multivariable regression analysis was undertaken to investigate possible associations.

**Results:** Data from 40% (n=25 of 62) of British DESPs are presented. 11,403 children and young people between aged 12 and 25 years at the beginning of the study period received annual screening invitations during each of the two audit years. Among them, the overall annual uptake was 68%. 22% attended only a single screening event, and 10% failed to attend both invitations. The respective percentages for children <16 years at the beginning of the study period (n=2,975) were 81%, 15% and 4%.

On regression analysis, failure to attend both screening invitations was associated with older age at the moment of screening invitation (OR, 1.14 per year, 95%CI, 1.11-1.17; p-value <0.001), being male (OR, 1.41, 95%CI, 1.24-1.60; p-value <0.001), belonging to more socio economical deprived deciles (1.07 per decile, 95%CI, 1.05-1.10; p-values <0.001) and older age at registration in DESP (OR, 1.03 per year, 95%CI, 1.003-1.06; p-value 0.027).
Conclusions: There appears to be a low annual diabetic eye screening uptake in young people, particularly in males from deprived backgrounds. Specific strategies may be required to increase attendance among these groups.

This abstract was presented at the 2019 ARVO Annual Meeting, held in Vancouver, Canada, April 28 - May 2, 2019.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.