

**00199 The Prevalence of and Factors Related to Non-adherence to Post-ophthalmic Screening Tertiary Referrals in Patients With Type 2 Diabetes**

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**Aims:** Although diabetes-related vision loss is preventable with regular screening and timely interventions, non-adherence to post-screening ophthalmic referrals (PSOR) remains undocumented in Singapore. This study determined the prevalence and factors of non-adherence to PSOR in a large sample of patients with Type 2 diabetes (T2DM).

**Methodology:** In this retrospective clinical observational study, we included 2387 patients with T2DM (mean[SD] age: 66.5 [11] years; 52.5% female; diabetes duration: 1-39 years) who underwent tele-ophthalmic screening between 2010-2014 using the Singapore Integrated Diabetic Retinopathy Programme (SiDRP), a national ophthalmic screening programme for individuals with diabetes. All had ocular conditions necessitating a tertiary ophthalmic referral to the Singapore National Eye Centre (SNEC) after SiDRP screening. Non-adherence was defined as not attending the SNEC appointment within 6 months from the appointment date according to the centre's electronic medical records. Regression analysis using a modified Poisson model determined the sociodemographic and clinical factors associated with non-adherence to PSOR.

**Result:** A total of 304 (12.7%) of the 2387 individuals included failed to adhere to PSOR. After multivariable adjustments for factors traditionally associated with PSOR, persons with better presenting vision, less severe diabetic retinopathy, having less than two eye conditions necessitating referral, and lower total and low density lipoprotein cholesterol ( $P < 0.05$ ) were less likely to adhere to PSOR. Our final multivariable model with the above factors was able to discriminate between adherent and non-adherent individuals with an accuracy (area under the curve) of 80%.

**Conclusion:** The prevalence of non-adherence to PSOR is lower in Asians with T2DM compared to Western populations. Similar to Western studies, we found that better vision, systemic and ocular health were also associated with non-adherence in our Asians. Prospective qualitative studies using patients from polyclinics and tertiary ophthalmic centers are needed to understand the underpinning reasons of non-adherence to PSOR in Singapore.