



CIHR Funds Research to Improve Diabetic Retinopathy Screening Among Newcomers to Canada

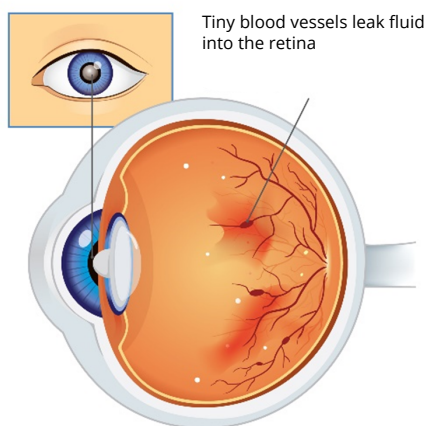
Written by Minhal Mussawar (Regina)

Diabetic retinopathy is a major complication of diabetes and is the leading cause of blindness in working aged people in the Western world.



Dr. Justin Presseau

Screening for diabetic retinopathy aims to detect and reduce damage from severe ocular complications. However, research has found that patients with diabetes often do not receive annual screenings for retinopathy, particularly elderly patients and those who live in areas with reduced access to specialists.¹ Another subgroup of patients that are much less likely to receive regular screenings for diabetic retinopathy includes recent immigrants to Canada. Furthermore, immigrants have lower rates of surgical treatment of diabetic retinopathy compared to long-term residents, suggesting that treatable retinopathy may be missed among recent immigrants because of inadequate screening that may be associated with reasons other than accessibility.²



Eye with Retinopathy

Diabetic retinopathy results in fluid leakage into the retina. Without treatment, it results in vision loss and blindness

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With this in mind, Dr. Justin Presseau, an Associate Professor at the University of Ottawa's School of Epidemiology and Public Health and School of Psychology and chair of our section, alongside Co-PIs Dr. Joyce Dogba³ and Dr. Michael Brent⁴, aim to target barriers to attending screening for diabetic retinopathy using funds recently awarded through a CIHR Project Scheme grant. Specifically, they plan to recruit people with diabetes from China, Africa and the Caribbean to participate in workshops and focus groups to discuss barriers associated with attending screening. Using this information, they will co-develop interventions aimed at overcoming these identified barriers alongside patients and healthcare stakeholders. Among planned intervention elements is the use of teleretina screening, where retina imaging can be done using a portable screening equipment so that people can be screened in their community instead of at a specialist appointment. They then plan to deliver the interventions over a 6-month period in Ottawa and Montreal with the aim of assessing their feasibility and acceptability.



This grant ties in nicely with Presseau and colleagues' previous work, which involved a systematic review of barriers and enablers to attending retinopathy screening, and a qualitative study of the barriers and enablers specifically associated with immigrants from China, Africa and the Caribbean. These studies found that current interventions on improving diabetic retinopathy screening were poorly-suited for the specific barriers immigrants and minorities face, suggesting that partnering with patients to improve interventions may help overcome limitations of past approaches and result in a more culturally and linguistically-appropriate intervention.



Presseau hopes that this research could be used to guide future studies extending past Montreal and Ottawa: "Findings will help to inform a more definitive larger-scale trial which could be run across more cities and ultimately then inform pan-Canadian approaches". The scalability of these interventions to visible minorities in rural and remote communities will also be an important consideration for Presseau and his team. Presseau also emphasizes that further research will be needed before the interventions are used in clinical practice: "We'll need to establish the evidence that our intervention works before it can be implemented. That will take longer than this particular grant". Though much work lies ahead, the newly funded research holds great promise in its potential to improve the prevention of blindness resulting from diabetic retinopathy among new immigrants to Canada.

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Dr. Justin Presseau



1— Boucher et al. (2005). *Can J Ophthalmol*, 40(6), 734-742

2— Lovshin & Shah. (2017). *J Diabetes Complications*, 31(4), 664-668.

3— Dr. Dogba's profile: www.tinyurl.com/joycedogba

4— Dr. Brent's profile: <https://ophthalmology.utoronto.ca/content/michael-brent>