

REFERENCES

1. Ontario Regulation 112/11. Designated drugs and standards of practice. 2011. Accessed June 27, 2016. URL: <https://www.ontario.ca/laws/regulation/110112>.
2. Azari AA, Barney NP. Conjunctivitis: a systematic review of diagnosis and treatment. *JAMA*. 2013;310:1721-9.
3. Haas W, Pillar CM, Torres M, Morris TW, Sahn DF. Monitoring antibiotic resistance in ocular microorganisms: results from the Antibiotic Resistance Monitoring in Ocular microorganisms (ARMOR) 2009 surveillance study. *Am J Ophthalmol*. 2011;152:567-74.
4. Fingeret M. The optometrist's role in glaucoma care. *Glaucoma Today* 2014;30-1.
5. Azuara-Blanco A, Burr J, Thomas R, et al. The accuracy of accredited glaucoma optometrists in the diagnosis and treatment recommendation for glaucoma. *Br J Ophthalmol*. 2007;91:1639-43.
6. Ho S, Vernon SA. Decision making in chronic glaucoma—optometrists vs ophthalmologists in a shared care service. *Ophthalmic Physiol Opt*. 2011;31:168-73.
7. Cheng J, Beltran-Agullo L, Trope G. Assessment of the quality of glaucoma referral letters based on a survey of glaucoma specialists and a glaucoma guideline. *Ophthalmology*. 2014;121:126-33.
8. Banes MJ, Viswanathan A, Garway-Heath D. Agreement between optometrists and ophthalmologists on clinical management decisions for patients with glaucoma. *Br J Ophthalmol*. 2006;90:579-85.
9. Eye Health Council of Ontario Writing Committee. Eye Health Council of Ontario guidelines for the care of patients with glaucoma. *Can J Optom*. 2013;75:35-40.
10. Eye Health Council of Ontario Writing Committee. Guidelines for the collaborative management of persons with diabetes mellitus by eye care professionals. *Can J Optom*. 2011;73:16-25.
11. Eye Health Council of Ontario Writing Committee. Guidelines for the collaborative management of persons with age-related macular degeneration by health- and eye-care professionals. *Can J Optom*. 2015;75:2-11.
12. Eye Health Council of Ontario: Mandate. (<http://ehco.ca/wp-content/uploads/2015/11/EHCO-Terms-of-Reference.pdf>). Accessed June 22, 2016.
13. Buys YM, Nicolele M. Interprofessional care and collaboration: are ophthalmologists and optometrists ready? *Can J Ophthalmol*. 2015;50:422-8.
14. Bellan L. Future trends in ophthalmology health human resources in Canada. *Can J Ophthalmol*. 2016;51:136-41.
15. Budning A, El-Defrawy S. Interprofessional collaboration in eye health care *Can J Ophthalmol*. 2016;51:130-2.

Can J Ophthalmol 2016;51:306–307

0008-4182/16/\$-see front matter © 2016 Published by Elsevier Inc on behalf of the Canadian Ophthalmological Society.
<http://dx.doi.org/10.1016/j.jco.2016.07.006>

Re: Johnson et al. Drug-prescribing patterns among optometrists and non-ophthalmologist physicians at a tertiary care centre in Kingston, Ontario



Dear Editor:

We thank Drs. Goodhew and Thienes for sharing their comments regarding our recent article on the prescribing of medications for ocular conditions by nonophthalmologist physicians and optometrists. Our prospective study encompassed 1 year of referrals to an emergency eye clinic at a tertiary care hospital in a unique setting where 1 emergency eye service captures virtually all urgent referrals in a large region of Ontario. Within this large series a number of important findings were observed. Based on our data set, which provides only a small window on optometry prescribing, it is important that we avoid making overly specific recommendations and refrain from political commentary. There are clearly multiple viewpoints regarding scope of practice and prescribing privileges, and these are better addressed by collaborative committees and in other appropriate forums.

Goodhew and Thienes suggest that the study was underpowered in its assessment of the frequency of prescribing regulation nonadherence. However, a lack of power generally refers to situations in which a study fails to detect a statistically significant result because of small sample size as opposed to a lack of true effect. In our study we did not compare the rate of regulation nonadherence as there was no logical comparison group. Instead we reported the raw data in order to be as transparent as

possible. The large proportion of glaucoma patients referred by optometrists with prescriptions not adhering to prescribing regulations (8/9 [0.89]; 95% CI: 0.59–0.99) strongly suggests that there are issues with the regulations in their current form. Of note, our report suggests that the initial prescription of medications by optometrists is likely reasonable in cases in which there are significant waits for access to ophthalmologic consultation, and that consideration could be given to amending regulations in cases with concurrent referral.

An additional argument brought forth by Goodhew and Thienes was that because optometrists are now able to prescribe medications for a variety of potentially serious conditions, they should thus be permitted to order and interpret diagnostic laboratory tests. We would like to stress that caution should be made in drawing such a conclusion. An important element of autonomous and responsible management of ocular disease is to stay within one's scope of practice. Arguably, if, for example, a corneal ulcer is severe enough to warrant scrapings and culture, or a patient with recurrent uveitis requires a systemic work-up, this is more suited to the scope of practice of an ophthalmologist.

As highlighted in our report, we also urge caution in the interpretation of the relative proportions of prescriptions falling within each drug class. The types of patients seen and the indications for therapy are likely different in emergency room settings, from which a large portion of the nonophthalmologist physician referrals came, versus clinic-based settings, from which optometry referrals came.

Notwithstanding these points, we do agree with Goodhew and Thienes that prescribing regulations for

optometrists in both Ontario and elsewhere in Canada are in need of revision. For example, in Ontario, the provision whereby glaucoma can be treated only if it is primary open-angle glaucoma and “not complicated by another ocular or systemic condition” is vague. On the other hand, overly specific recommendations such as in Quebec, where corneal ulcers cannot be treated if “central or >1 mm in size,” are perhaps overly specific and could handcuff a practitioner with poor access to an ophthalmologist.

In summary, ophthalmologists and optometrists must continue to collaborate with other stakeholders to define scope of practice and work to ensure that all patients have access to quality vision care. We must also ensure that we continually examine the changes made to health care, including scopes of practice, to establish that they are appropriate and have their intended impact, and improve the care patients receive. Through such vigilance and quality assurance we can move forward to provide optimal care for our patients.

Robert J. Campbell, MD, MSc, FRCSC,^{*,†,||}
Davin Johnson, MD, FRCSC,^{*,†}
Sherif R. El-Defrawy, MD, PhD, FRCSC^{‡,§}

^{*}Department of Ophthalmology, Queen’s University, Kingston, Ont; [†]Department of Ophthalmology, Hotel Dieu and Kingston General Hospitals, Kingston, Ont; [‡]Department of Ophthalmology, University of Toronto, Toronto, Ont; [§]Department of Ophthalmology, Kensington Eye Institute, Toronto, Ont; Institute for Clinical Evaluative Sciences, Toronto, Ont.

Correspondence to: Robert J. Campbell, MD, MSc, FRCSC, Department of Ophthalmology, Hotel Dieu Hospital, 166 Brock Street, Kingston, Ont. K7L 5G2: rob.campbell@queensu.ca

Can J Ophthalmol 2016;51:307–308

0008-4182/16/\$-see front matter © 2016 Published by Elsevier Inc on behalf of the Canadian Ophthalmological Society.
<http://dx.doi.org/10.1016/j.jcjo.2016.07.007>