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## National survey of Canadian Retina Society members on guidelines for ophthalmic care during the COVID-19 crisis: Canadian Retina Research Network (CR2N) COVID-19 Steering Committee analysis



An anonymous survey was designed by the Canadian Retina Research Network coronavirus disease 2019 (COVID-19) Steering Committee to assess awareness of, confidence in, and adherence to recent guidelines released by the Canadian Ophthalmology Society (COS) and Canadian Retina Society (CRS) for ophthalmic care during the COVID-19 pandemic.<sup>1,2</sup> The survey was pilot-tested and validated with 9 content experts. It was then distributed via email to physician members of the CRS in May 2020 with one reminder email to maximize response rate. Research ethics board approval was waived at our lead institution for this quality improvement study.

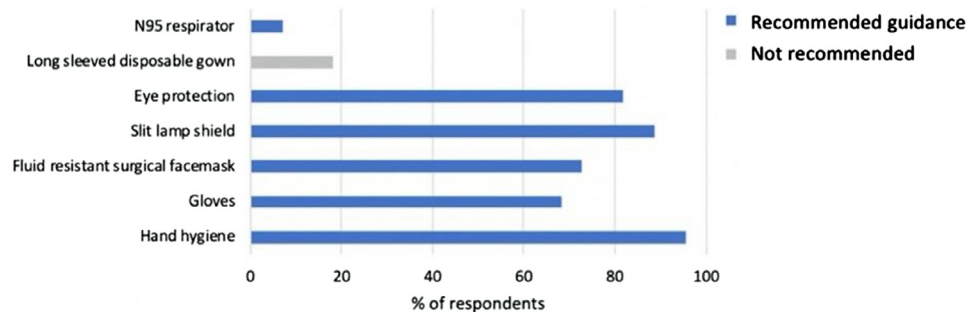
In total, 44 of 118 retinal specialists completed the survey, yielding a response rate of 41%. Response rates above 40% have previously been deemed adequate for surveys of high importance and for which only a short period is available to conduct fieldwork.<sup>3</sup>

All but 2 respondents were aware of national personal protective equipment (PPE) and practice management guidelines from the COS and the CRS. Eighty-three percent expressed that they were “somewhat confident” or “very confident” in the proposed guidance. All respondents were aware of the importance of hand hygiene, and over 90% were aware of guidance on eye protection and the use of slit-lamp breath shields. Almost 70% of respondents were aware of guidance on the regular use of a fluid-resistant surgical facemask, gloves, or an N95 respirator when indicated. Notably, 30% of respondents believed that the routine use of long-sleeved disposable

gowns was recommended in COS and CRS guidance. Nearly 20% of respondents claimed to have adopted use of such gowns, even though this is not currently advised by either society at the time of writing (Fig. 1).

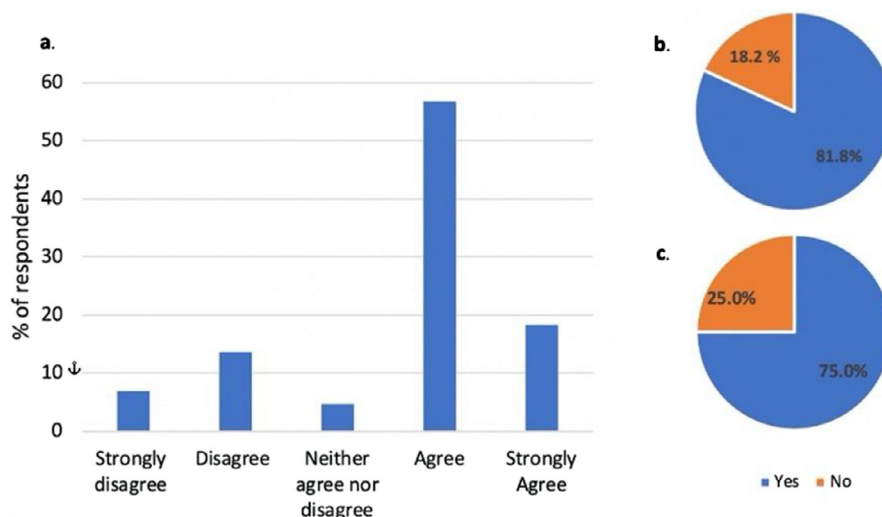
All respondents stated that they implemented strategies to defer care for nonurgent cases, to enforce cleaning of equipment between each patient encounter, to decrease patients’ time spent in the waiting room, and to restrict accompanying persons from entry into the clinic to promote optimal physical distancing. Respondents were less likely to adhere to guidance recommending the instillation of single-use eye drops (50%), asking patients to limit or decrease conversation (66%), and the lengthening of treatment intervals for eligible patients receiving intravitreal injections for retinal disease (73%).

The survey results demonstrated strong awareness among CRS members of the guidelines recently released by COS and CRS in response to the COVID-19 crisis, suggesting that the mechanisms of dissemination used by these governing bodies were successful at reaching their physician members in a timely manner. These mechanisms could be adopted effectively in future events of similar magnitude and importance. Nevertheless, the present study did also reveal suboptimal understanding of, and adherence to, specific aspects of this guidance. For example, the fact that over 30% of specialists endorsed awareness of guidance never proposed by COS and CRS indicates some confusion with the guidance released. Presumably this resulted from being inundated with messaging from a myriad of other sources, as 32.6% of respondents claimed to have consulted web sites, academic rounds, hospitals, and other local and regional health regulatory authorities for PPE-related guidance during the COVID-19 crisis. Likewise, the proportion of physicians without a recent N95 respirator fit test (18%) or recent PPE training (25%) demonstrates a lack of preparedness to adopt such guidelines (Fig. 2). Minocha et al. published a similar survey in the United Kingdom, in which they observed that a lack of



Percentage of respondents adopting PPE recommended in COS and CRS guidelines. Use of six PPE items recommended in COS and CRS guidelines (blue) and one item of PPE not present in either guideline (grey) was assessed.

Fig. 1—Adherence to specific Canadian Ophthalmology Society and Canadian Retina Society (CRS) guidance on PPE use among CRS members.



- (a) Respondent agreement with the following statement: "necessary personal protective equipment is usually available to me for routine patient encounters during the COVID-19 pandemic"
- (b) Proportion of respondents with formal N95 mask fitting within preceding 24 months
- (c) Proportion of respondents with PPE training within preceding 12 months

**Fig. 2—Perceived availability of necessary PPE and preparedness for its use according to Canadian Ophthalmology Society and Canadian Retina Society guidelines.**

coordination and agreement between federal guidelines and those released by local health units and hospitals risked confusion for practitioners and patients alike.<sup>4</sup> Thus, in response to COVID-19, we suggest that future mechanisms be refined to coordinate clear, standardized, uniform, and evidence-based guidance for best-practice clinical management and the use of PPE in ophthalmic care.

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