

Background

Infection control (IC) is an integral part of every optometry practice; never more apparent than during the COVID-19 pandemic.

Methods

A cross-sectional survey was designed and pilot-tested. Following minor modifications, Optometry Australia members were invited to complete the survey in late January 2021.

Results

In total, 407 optometrists responded; 105 responses were removed due to incomplete data, leaving 302 responses in the final data analysis (6% response rate).

Knowledge:

Out of 16 questions, the average score was 9.3 (± 2.1); the question answered correct most frequently (98.0%) was 'During standard precautions, which area/s of the consulting room should be cleaned on a daily basis?'—door knob (Fig 1).

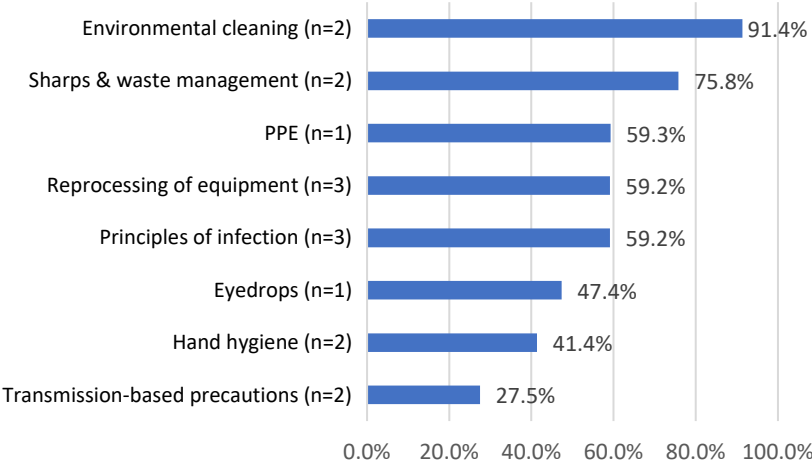


Fig 1: Correct responses (avg %) for n=16 knowledge-based questions across IC themes

Attitude: 85.1% of optometrists strongly agree they are responsible for best-practice IC; only 41.5% strongly agree they understand best-practice IC techniques (Fig 2).

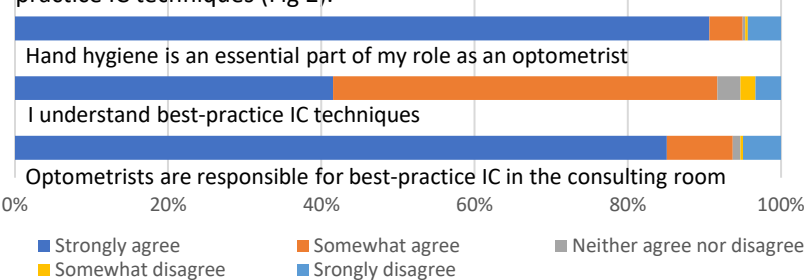


Fig 2: Optometrists' attitudes to IC

Practice behaviours: 68.5% of optometrists would never work with patients if they had symptoms of conjunctivitis. However, 34.6% of optometrists reported patients with infective eye symptoms were never isolated in the practice (Fig 3).

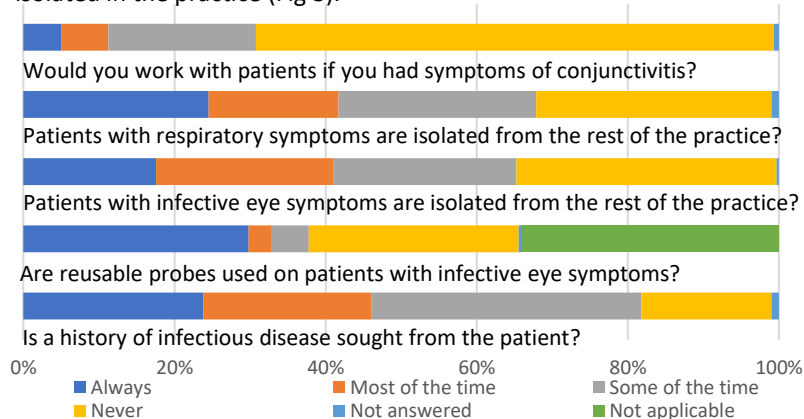


Fig 3: Transmission-based precautions practice behaviours

48.3% of optometrists reported use of 70% isopropyl wipes to disinfect tonometer probes, despite this contravening best-practice [advice](#).¹ Only 5.0% and 4.3% reported use of high-level disinfection for tonometer probes; dilute bleach and Tristel Duo respectively. 53.6% reported use of disposable tips and 41.1% used non-contact tonometry.

Barriers: 75.2% reported at least one barrier to providing best-practice IC - insufficient time was the most frequently identified (46.5%) barrier.

Impact of COVID-19 pandemic (n=284, Fig 4)

- The rate of slit lamp breath shield use increased 5.8 times; telehealth optometry use increased 11.9 times; and triage use increased 4.1 times.
- When the patient had respiratory symptoms, optometrists' face mask use increased 4.4 times and physical distancing in the waiting room increased 4.6 times.
- During the height of the pandemic, the procedures most commonly avoided were direct ophthalmoscopy and contact lens fitting, followed by contact tonometry and gonioscopy; the PPE most commonly used was a face mask.

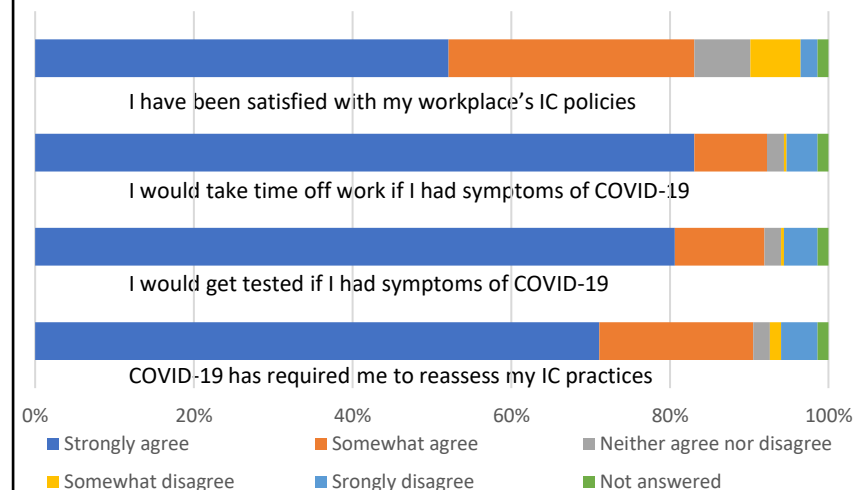


Fig 4: Optometrists' attitudes to IC since the COVID-19 pandemic

Conclusion

Optometrists have changed their IC practice since COVID-19, increasing their use of slit lamp breath shields, PPE and triage. Although of a generally high standard, there is room for improvement in optometrists' knowledge and practice behaviours, particularly in relation to transmission-based precautions.

References

- Hart et al. Infection control guidelines for optometrists 2020. <https://doi.org/10.1080/08164622.2021.1887704>