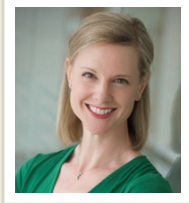


# Contact Lens Update

CLINICAL INSIGHTS BASED IN CURRENT RESEARCH

## A Year in Review: A Global Perspective on the Most Extraordinary of Years in Clinical Practice

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**Karen Walsh is the Professional Education Team Leader and Clinical Scientist at the Centre for Ocular Research & Education, (CORE) based at the University of Waterloo, Canada. She has previously worked as a Professional Affairs Manager in the contact lens industry, and in clinical practice in the UK. She holds a post graduate diploma in Clinical Optometry from City University, London UK, and is a Fellow of the International Association of Contact Lens Educators and the British Contact Lens Association.**

In March 2020, Contact Lens Update broke with its own protocol, changing from planned research-based content to releasing instead a topical issue about COVID-19. The pandemic had just been declared, and questions were being asked about the safety of contact lens wear. The need for information in those early days was clearly illustrated by the pageviews of that issue, being nine times higher than average for our resource. A full nine months have now passed and as the end of the year draws to a close, it seems appropriate to take a moment to reflect on events of the year through the eyes of clinicians, researchers and educators who have been on the front line delivering clinical care to their patients.

While COVID-19 has affected everyone, variation is evident in its impact around the world, the reaction of each government in terms of the measures imposed to control the spread, and of professional organisations in their recommendations for clinical practice. To paint a picture of what the profession has encountered, ten eye care professionals (ECPs) were contacted to share their experience. A range of countries and specialties were included (Table 1).

NAME	COUNTRY	PROFESSION AND POSITION	SPECIALTIES AND WORK FOCUS
Alan Saks	Australia	Optometrist, CEO Cornea & Contact Lens Society Australia (CCLSA)	Focus on education and professional messaging for CCLSA
Richard Yudi Hida	Brazil	Ophthalmologist, Private and Academic clinics	Dry eye, and surgery for cataract, retina and cornea
Todd Ruhl	Canada	Optometrist, Owner Flamborough Family Eyecare, Ontario	General practice plus specialty contact lenses and myopia control
Vincent Chui	Hong Kong	Optometrist, Director, Hong Kong	General practice and myopia control
Daddi Fadel	Italy	Optometrist, Private Practice Poggio Mirteto	General practice plus specialty lenses, myopia control and dry eye
Alex Muntz	New Zealand	Optometrist and Research Fellow, Ocular Surface Laboratory, Auckland	Clinical and basic science research laboratory
Wen Juan Chui	Singapore	Optometrist, C.C. Chui Optica	General practice including orthoK and dry eye
Maria Korén	Sweden	Optometrist, Synsam Gothenburg and Trollhättan	General practice including myopia control
Sarah Farrant	United Kingdom	Therapeutic Optometrist, Earlham and Christopher, Somerset	General practice, plus dry eye, myopia control and acute eye care
Bridgitte Shen Lee	United States	Optometrist, Co-founder and CEO Vision Optique, Texas	Primary and specialty eye care including myopia control and dry eye disease

**Table 1:** Contributors to the COVID-19 review

This editorial shares their thoughts on how they have found 2020, and their outlook on the future. We thank all ten clinicians for taking the time to share their experiences.

### Impact on clinical practice

Our panel was first asked to describe the impact of COVID-19 on their practice. Most experienced a period of lockdown, with the timing of initial closure to routine eye care varying from March (Italy, UK, Canada, Brazil and the US) to April (Singapore). Emergency eye care continued throughout, with measures to enable patients to be seen safely needing to be implemented quickly. Lockdown in Australia was noted as varying by state, an approach that was also evident in the US. The experience in Sweden was different, with **Maria Korén** sharing that reduced hours occurred initially “*but after a month or so we opened up again with the influx of customers back to the levels before the pandemic.*”

Return to something close to routine practice happened for most around June to July, with the safety measures of disinfection procedures, wearing of personal protective equipment (PPE), addition of breath shields and plastic barriers, and patient screening that were implemented for the emergency care phase of lockdown continuing for all. Both **Alan Saks** (Australia) and **Vincent Chui** (Hong Kong) commented on the significant drop in revenue resulting from the period of lockdown, although both indicated this has returned to more normal levels once routine practice was able to open up again.

Use of remote patient screening and triaging of patient symptoms has been implemented in many practices. In Italy, **Daddi Fadel** commented that “*empirical fitting increased and has become the main procedure used with fitting specialty contact lenses.*” This required her to invest in new equipment and services to help offer digital imaging and telemedicine. The increase in telemedicine has been reported widely among the profession, with

a number of points relevant to remote delivery of care summarised in an article by Manbir Nagra et al in April 2020.<sup>1</sup> The need to invest in equipment to help aid thorough disinfection of the office was also noted by **Todd Ruhl** (Canada). Creative thinking was also evident with Todd sharing that he opened an additional lane to enable patient flow, allowing the next person to be seen while the previous consulting room was sanitised. Both **Wen Juan Chui** (Singapore) and **Sarah Farrant** (UK) commented that patient appointments continue to be spaced out through the day, and practices remain busy, with Sarah booked for more than two months ahead. New Zealand is widely recognised as being particularly timely with their lockdown policy, and following periods of having zero active cases in the country, **Alex Muntz** reports that “clinics, clinical research and practices are currently operating under normal conditions.” This was confirmed as meaning, other than mandated mask wear on public transport, clinic appointments can be conducted without masks or PPE at present (unless worn by personal choice). A fascinating insight into what we may all hope to achieve at some point over the next year perhaps?

### Impact on patients

The impact on patient’s mental health was noted by ECPs in Italy, Australia, Brazil, Sweden and UK, with particular reference to the inability to see friends and family being one of the main causes of the struggle patients have experienced. Consistent themes were reported relating to contact lenses, with reduced wear occurring for patients while in lockdown and working from home. This was primarily due to a lower cosmetic need to wear lenses, a view which agrees with published data that found between 43-72% of wearers had reduced wear initially in lockdown.<sup>2-4</sup> Some early reduction in wear of contact lenses in Italy was reported by Daddi Fadel following patients seeing stories in the media that lens wear was not safe; misinformation that was corrected early on following an extensive review led by CORE director, Lyndon Jones,<sup>5</sup> with information for both ECPs and patients available at [COVIDEyeFacts.org](https://COVIDEyeFacts.org).

The fogging that occurs when spectacles are worn together with face masks was mentioned by the panel, with different approaches taken to help resolve it. An increase in patients requesting, or being recommended, contact lenses was noted by **Todd Ruhl** (Canada) and **Maria Korén** (Sweden), with **Richard Yudi Hida** (Brazil) reporting patients being referred for refractive surgery as a solution. **Bridgitte Shen Lee** (US) remarked that she was seeing an increase in ocular surface issues as a result of mask wearing. Termed mask-associated dry eye (MADE), it arises from exhaled air being repeatedly forced over the surface of the eye, increasing tear film evaporation and resulting in a dry ocular surface.<sup>6,7</sup> There are some simple steps ECPs can advise patients to take to help alleviate the issue, and these are summarised in the [Clinical Insight](#) section of this issue of Contact Lens Update.

Several of the panel said patients had been impacted by increased use of digital devices. **Wen Juan Chui** (Singapore), **Bridgitte Shen Lee** (US) and **Maria Korén** (Sweden) encountered patients reporting an increase in digital eye strain, noting asthenopic symptoms resulting from a suboptimal work station set-up at home, and inadequate vision correction for the extended periods of time required for these visual tasks. Increased digital device use, either for work or social use, was connected to an increase in dry eye symptoms in Italy and the US. These effects were not only noticed in adults, as illustrated by the results of a study shared in the [Conference Highlight](#) section of this issue which demonstrates the impact of online learning on dry eye symptoms in high- and middle-school students.

Existing dry eye patients were found to exhibit a worsening of their condition, partially through the inability to return for routine assessment. This was noted by **Sarah Farrant** (UK), **Daddi Fadel** (Italy) and **Alex Muntz** (New Zealand). For **Sarah** this served as a good reminder of the importance of seeing these patients regularly. **Alex** commented on the success of remote management for some of his dry eye patients, saying “dry eye appeared suited to [remote appointments], as recommendations for self-care play a significant role in managing the disease.”

## Challenging moments

The panel have experienced similar challenges during the year, mainly themed around dealing with uncertainty and issues of safety. The first challenge was cited as the speed of the initial changes required as lockdown started. **Sarah Farrant** (UK) recognised that things changed overnight, with a fast-moving response required from her and her staff to regroup and move forward. From his role within the CCLSA, **Alan Saks** (Australia) noted the intensity of those early days as his team worked almost around the clock to pull together information and positioning statements for the profession.

All of the ECPs who are in practice and seeing patients voiced their concerns over trying to do their best to ensure the safety of both their staff and patients. This included trying to work through the deluge of information, advice and guidance to understand what 'best-practice' entails. **Vincent Chui** (Hong Kong) summarised this by saying one of his most challenging moments was *"providing accurate information to clients at the early stage when we had not fully understood the details about COVID-19 and how it impacts eyecare."* **Todd Ruhl** (Canada) shared the challenge of making decisions on what pieces of advice to act on, and then how to apply those decisions within his practice. The ECPs based in Hong Kong and Singapore both encountered shortages of either PPE or disinfection supplies in the first few weeks of the pandemic.

Naturally, concerns were voiced about loss of income and potentially having to temporarily shut down again, either through a positive COVID-19 result or a second lockdown. Uncertainty over the length of the pandemic was mentioned by a number of the ECPs. The experience of the panel with their staff situation varied. While some had reduced staff numbers, others were able to either maintain or bring staff back once fully open, and in the US, **Bridgitte Shen Lee** (US) actually increased staff positions during the year.

**Todd Ruhl** (Canada) provided a couple of interesting comments in relation to challenges he has encountered. First, the impact of wearing masks, and the burden of sanitisation procedures impacting staff morale – while absolutely necessary, he noted they result in a loss of the 'fun' and positive atmosphere cultured in his office. Secondly, he highlighted a more recent change: patient apathy. A sense that the pandemic has been here for a long time, and some patients are drifting away from safety procedures such as physical distancing, answering COVID screening questions honestly, or wearing a mask consistently. Related to the last example of mask wearing, the recent video examples generated by Prateek Bahl and team, and shared in the [Feature Article](#) section of this issue, illustrate the difference in efficacy of different types of cloth and surgical masks. All of the masks tested are shown in comparison to wearing no mask at all which provides an important reminder of the value masks deliver when looking to reduce transfer of aerosols and droplets from the mouth and nose.

## The positives and looking to the future

Our panel shared a number of positives to come out of this year. The forced shutdown gave time to focus on their business. For some, such as **Daddi Fadel** (Italy), that enabled investment in new technology, for others like **Bridgitte Shen Lee** (US) it provided the opportunity to launch a new website and comprehensive online services. Spending more time with family was noted as a positive too. While the lack of travel to meetings was a definite negative for some, others recognised the benefit of being able to access a wide range of online continuing education and attend virtual conferences throughout the year.

The changes to clinical practice have focussed staff and patients on the importance of hygiene, with some ECPs commenting on the improved compliance demonstrated by patients in general, and their contact lens wearers in particular. It is hoped these improved habits will stay, with **Wen Juan Chui** (Singapore) feeling they may potentially result in fewer contact lens complications too. The flexibility of the profession to adapt to such unprecedented circumstances was noted. **Alan Saks** (Australia) commented on the positives for Australia: *"Our practitioners refocused and redoubled their efforts to provide world class eyecare...safety and disinfection*

*standards are at an all-time high.*” Speaking of the experience of her practice team, but a relevant point for the wider profession, **Sarah Farrant** (UK) remarked “*We have been adaptable and resourceful – if we can work around this, we can work around anything!*”.

When looking to the future, a couple of the panel voiced concerns for 2021 in relation to the uncertainty of when a vaccine will be available and the potential impact of the pandemic on the global economy. However, eight of the ten panellists agreed they were feeling positive heading into next year, looking forward to continuing to deliver exceptionally high standards of eyecare to their community.

### Summary

There is no doubt 2020 went in a direction no one could have predicted, turning into perhaps the most challenging of years ever experienced in clinical practice. The experiences of our panel provide a fascinating insight into the similarities and differences encountered in countries around the world. Common to all however are strong themes of resilience, adaptability and consummate professionalism, all focussed on ensuring the continuing delivery of safe patient care. At Contact Lens Update we are already looking forward to the 2021 year review that can hopefully report the positive steps towards wide scale vaccinations, further return to ‘normal’ clinical practice, while maintaining some of the new positive steps such as telehealth, making better use of technology and continued improved compliance of patients.

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