Changes in contact lens wear and compliance to contact lens hygiene practices during the COVID-19 pandemic
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Introduction

• Contact lens (CL) wear and compliance to hygiene behaviours may have changed during the COVID-19 pandemic.1
• To minimize the transmission of the virus, the World Health Organisation (WHO) and the Australian Government have advised regular handwashing, reduced face touching with hands and postponing non-essential activities.2,3
• There is no current evidence that suggests CL wear poses a greater risk for COVID-19 transmission. It is recommended that CL wearers avoid lens wear if feeling unwell and continue to follow advised CL hygiene practices to ensure healthy lens wear.4

Aim

To determine changes in contact lens use and hygiene behaviours during the COVID-19 pandemic.

Methods

• An anonymous online survey was distributed to Australian contact lens (CL) wearers using Qualtrics between March – August 2020.
• The survey was approved by the UNSW Human Research Ethics committee (HC200317).
• This survey obtained general information including demographics and general CL usage focussing on 4 key areas before and during COVID-19, including:
  • CL usage
  • Optometry advice & visits
  • Hand hygiene practices
  • Storage case hygiene practices and CL care solution use
• Participants’ perception of COVID-19 and its impact on CL wear
• Descriptive statistics and frequencies were obtained for variables such as demographics, CL use and hygiene behaviours
• Data analysis was performed using SPSS and the level of significance was set at 5%.

Results

• 107 participants completed the survey (Mean age: 29.1 ± 9.9 years old, 80% female).
• Daily disposables (62%) were the most common contact lens modality.
• There was a significant decrease in the number of CL wear days (Figure 1) and participants were less likely to seek optometric care (Figure 2) during COVID-19.
• During COVID-19, the frequency of hand washing increased before handling the CL (Figure 3) and participants spent significantly more time washing their hands (26 ± 13 Vs. 18 ± 12 seconds pre-COVID; p<0.001)
• There was no significant change in storage case hygiene behavior during COVID-19 (Table 1).
• 82% of the participants did not believe their risk of contracting COVID-19 would increase with CL wear. However, significantly more participants (40% vs. 23%; p<0.001) reported that they would stop CL wear if they developed flu-like symptoms during COVID-19.

Conclusion

This study reports a decrease in the contact lens wear during COVID-19 pandemic in Australia. There was a noticeable increase in hand hygiene, but were no significant changes to contact lens or storage case hygiene practices.

References


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