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PURPOSE

In 2015 SCOPE I, an international survey of scleral lens fitters, collect preliminary data on prescription and management practices. While the original study provided a general overview of scleral lens fitting practices, potential recollection bias was one of its major limitations. This study was designed to address this limitation.

METHODS

Study Design

- Cross-sectional study utilizing an electronic (REDCap) survey.
- Survey was distributed to:
 - SCOPE I survey participants
 - Members of the Scleral Lens Education Society
 - Electronic links to the survey were posted in the British Contact Lens Association and I-Site newsletters
 - Links to the survey were also posted on social media groups/pages for contact lens and scleral lens fitters
- Available from December 13 2016 through March 31 2017.
- Participants were asked to provide information on their most recently evaluated established scleral lens patient (≥ 6 months of scleral lens wear).

Study Questions

Respondents provided the following information:

- Patient age and gender
- Laterality of lens wear
- Approximate number of hours of lens wear daily
- Solutions used
 - Daily surfactant cleaner
 - Disinfection/storage solution
 - Application solution
- Mid-day fogging
 - Presence or absence at this visit
 - Regular need for mid-day removal
 - Frequency of mid-day removal

Statistics

- Data were de-identified prior to analysis.
- Responses were sorted for descriptive analysis.

RESULTS

Patient Demographics

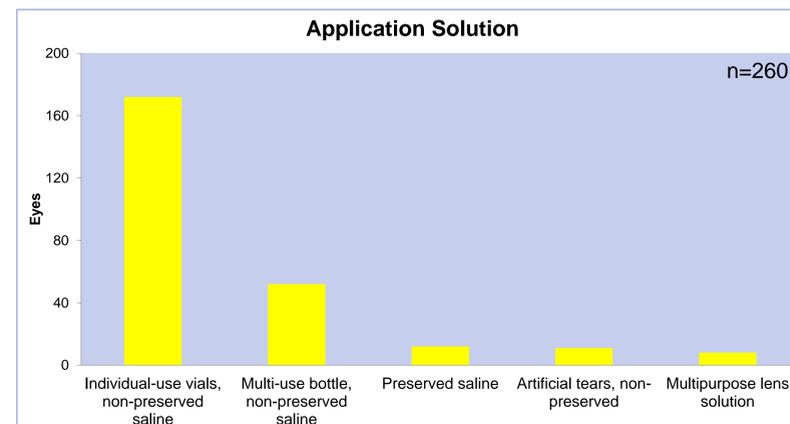
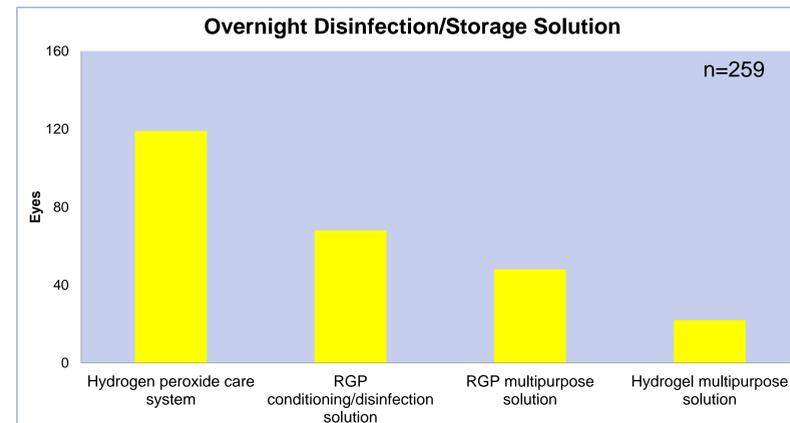
- 339 responses received
- 24 countries represented
- Age: 44 ± 14 years (range 9-86 years, n=339)
- Gender: 62% male, 38% female (n=352)
- Laterality
 - 260 OD, 266 OS
 - (233 patients wore lenses OU)
- Duration of lens wear
 - 2.5 ± 1.9 years OD (range: 0.5 – 16 years)
 - 2.5 ± 2.0 years OS (range: 0.5 – 16 years)

Number of Hours of Lens Wear Daily (n=262)

Mean [SD]: 12.6 [3.0]
Median: 14
Range: 4-18

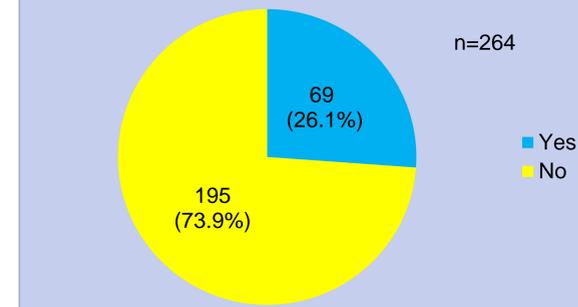
Solutions Utilized in the Care of Scleral Lenses

61.8% of patients use a daily surfactant cleaner (n=259)

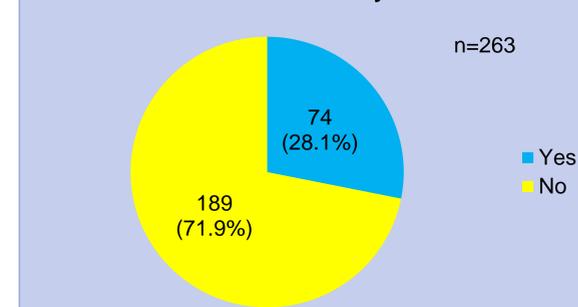


Mid-Day Fogging

Did patient report issues with mid-day fogging or accumulation of debris in post-lens fluid reservoir at this visit?



Does the patient routinely remove and reapply their scleral lens during the course of the day?



Approximately how many times does the patient remove and reapply the lens during the course of the day? (n=72)
Mean [SD]: 1.56 [1.04]
Median: 1.0
Range: 1-5

CONCLUSIONS

- This study confirms the following results reported from the original SCOPE practitioner survey:
 - Average daily wearing time of approximately 12 hours
 - Hydrogen peroxide care systems recommended for lens disinfection and storage
 - Non-preserved saline to fill the bowl of the lens prior to application is recommended
- The present study examined the phenomenon of mid-day fogging in more detail than the earlier study.
 - 25-30% of patients in this study find it necessary to remove and reapply the lens during the course of the day.
 - Original study found that 73% of providers recommended mid-day removal at least some of the time.

REFERENCES

1. Nau CB, Harthan J, Shorter E, Barr J, Nau A, Chimato NT, et al. Demographic Characteristics and Prescribing Patterns of Scleral Lens Fitters: The SCOPE Study. Eye & contact lens. 2017.
2. Harthan J, Nau CB, Barr J, Nau A, Shorter E, Chimato NT, et al. Scleral Lens Prescription and Management Practices: The SCOPE Study. Eye & contact lens. 2017.
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SUPPORT

