

Understanding Lens Performance from Wearers of Monthly Replacement Contact Lenses

Monthly replacement soft lenses have dominated the UK contact lens market over the last decade. *Jeanne Frangie, Silja Schiller and Lisa Ann Hill* look at the experiences of monthly lens wearers and what motivates them to upgrade to better performing lenses.



Much has been written on the subject of contact lenses with shorter replacement schedules and their potential benefits for patients both in comfort terms and as a more healthy way to wear lenses. And yet despite the growing popularity of daily disposable and two weekly lenses in recent years, monthly replacement still accounts for around half of soft lens fittings in the UK. Prescribing data for 2008 show that 41% of new soft lens fittings and 51% of re-fits are for monthly replacement.¹

Eye care professionals may be tempted to assume that most of their monthly replacement patients are satisfied with their current contact lenses and that there is no real need to upgrade them. But the fact is that many monthly contact lens wearers still experience discomfort with their lenses, whether made from hydrogel or silicone hydrogel material and this is a key issue to address if they are to continue wearing their lenses successfully.

Comfort may be the most important attribute of contact lens wear for consumers and discomfort is certainly the principal reason they drop out.² But for the practitioner, and for the patient, ocular health is also paramount. So if an opportunity exists to upgrade monthly replacement lens wearers to better performing lenses, should the practitioner capitalise on it? Are monthly lens wearers actually dissatisfied with their lenses? And if so, are they really open to trying new products, especially if it means changing to a more frequent replacement regime or paying more for additional benefits?

Nearly one in four contact lens wearers in the UK now uses SiH lenses³ and the latest prescribing figures show that nearly one in three new soft lens fittings (32%) and more than four out of 10 refits (41%) are

currently with SiH lenses.¹ Might there be an opportunity to upgrade these wearers to even better performing products and, if so, does this require a different approach from the practitioner?

To find out, a survey was recently conducted to investigate monthly replacement wearers' experience with their contact lenses. Wearers using a variety of monthly lens brands, traditional hydrogel and SiH, were asked about their attitudes to their current lens performance, their interest in trying new lenses and their perceptions of the eye care professional's role in communicating the benefits of contact lens

were analysed separately. However, where there was no statistically significant difference in responses between the two groups, statements could be made about the monthly replacement wearer overall.

Data were analysed for a total of 434 existing contact lens wearers who completed the survey. Of these, 271 were wearing monthly replacement hydrogel lenses and 163 wore monthly SiH lenses. All wearers were aged from 18-40 years and were frequent contact lens users, wearing their lenses at least three days a week and either all day long or during the day. Lens wearing history (i.e. number of years' wear) and care regime were not investigated in this survey.

In total, 20 different brands of lenses were represented (Table 1). These included commonly prescribed hydrogels such as Proclear, Precision UV and SofLens 66, and SiH lenses such as PureVision, Air Optix and Biofinity. The monthly replacement lens Surevue was the only Johnson & Johnson Vision Care product represented, since the company's other brands are recommended for daily, weekly or two-weekly replacement.

Air Optix	17%
PureVision	16%
SofLens 66	10%
SofLens Comfort	8%
Precision UV	8%
Biomedics	8%
Focus	7%
Proclear	6%
Surevue	6%
Other brands	14%

Table 1: Lens brands worn

innovations.

The online survey was conducted among consumers in France during October and November 2007 by an independent market research company. The survey was sponsored by Johnson & Johnson Vision Care, although subjects were unaware of the sponsor's identity. The sample was randomly selected from a consumer database of contact lens wearers designed to be representative of all existing brands in the French market. The data for the two samples, hydrogel wearers and silicone hydrogel wearers,

Current lens performance

More than two thirds of monthly replacement lens wearers (68%) notice a decrease in wearing comfort over the course of a month and the sensation of growing discomfort is experienced almost equally by wearers of hydrogel and SiH lenses, with no significant difference between the two lens types (Figure 1).

Asked which week of the month, in general, these wearers start to notice that their lenses become uncomfortable, more than nine out of 10 (95%) say that they become aware of discomfort in weeks three and four (Figure 2). Monthly SiH wearers who

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experience discomfort tend to notice it earlier in the lens cycle than hydrogel wearers.

Monthly replacement lens wearers notice a decline in lens performance over the course of a month in several key areas. Just over eight out of 10 wearers (82%) find their lenses less comfortable at the end of the month compared to the beginning, and two thirds (66%) say their lenses feel drier. Six out of 10 monthly lens wearers report that their lenses feel more gritty/dirty at the end of the month. Performance in all these areas declines equally with hydrogel and SiH lenses.

For over half of wearers, subjective perceptions of vision and ocular health also worsen over the course of a month's wear. More than six out of 10 (64%) feel their vision is less clear at the end of the month compared to the first day they put the lenses in, and more than half (53%) feel the lenses are less healthy for their eyes. Again, these perceptions are shared by SiH and hydrogel wearers alike.

There is also evidence that some monthly wearers are replacing their lenses more often than once a month in order to maintain comfort, regardless of lens type. Although only a small proportion of wearers (5%) do so very frequently, about one in three (34%) report that they have replaced their lenses before the end of the month due to discomfort and this is the case for hydrogel and SiH wearers.

Interest in trying new lenses

Encouragingly, the survey reveals very high levels of interest in trying new products. More than nine out of 10 monthly wearers (93%) say they would like to try a new lens that gave them better comfort and almost all (97%) express an interest in a lens that would provide better ocular health. A higher proportion of hydrogel wearers than SiH wearers are interested in lenses with improved comfort (93% versus 88%), although this difference is not statistically significant.

Importantly, this interest in trying new products continues to be strong even when told that they will need to replace their lenses more frequently. Both comfort and ocular health are important motivators to upgrade, although the survey shows their decision is more likely to be motivated by the latter. Asked whether they would like to try a new lens that gave them better ocular health, even though this would require them to replace

lenses more frequently (twice a month), more than nine out of 10 (93%) say they are likely to do so. Almost eight out of 10 (77%) say they would be interested in trying a two-weekly lens offering better comfort. When asked about daily disposable lenses, almost eight out of 10 (77%) say they would be likely to try a new lens that was replaced every day and which gave them the feeling of a 'fresh new lens' each day. A similar proportion (75%) are interested in trying daily disposable lenses that do not require the use of solutions. Monthly replacement hydrogel wearers are more receptive than monthly silicone hydrogel wearers to switching to daily disposables for health reasons; 68% of

hydrogel wearers are interested in a daily disposable that would offer better ocular health compared to 58% currently wearing SiH lenses ($P < 0.05$). Interestingly, although comfort is a driver for wearers to pay more for their lenses, it is health benefits that are more likely to persuade them to pay more. More than eight out of 10 wearers (83%) are willing to pay more for a lens that would offer them better ocular health. When comfort benefits are mentioned, the response depends on what type of monthly replacement lens they are currently using; seven out of 10 hydrogel wearers say they are willing to pay more for a lens that would offer them greater comfort compared to 65% of SiH wearers.

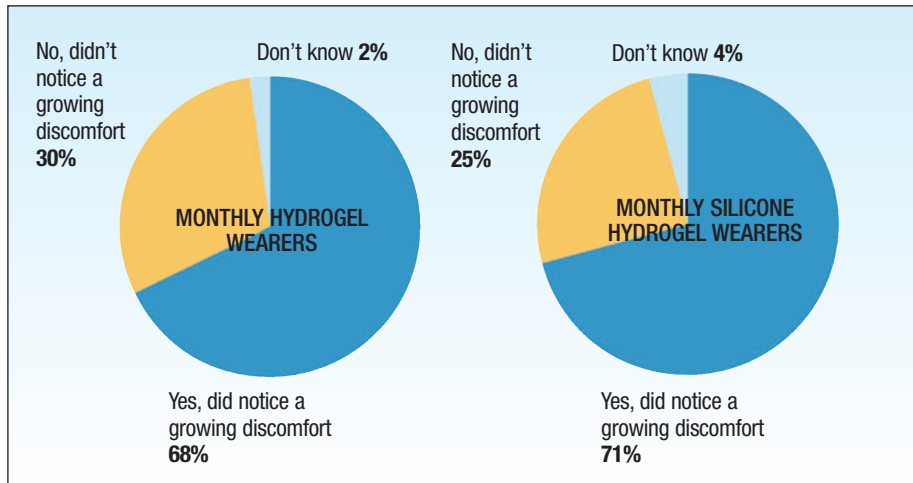


Figure 1: Have you noticed a decrease in your wearing comfort over the course of the month? (N=271 monthly hydrogel wearers, N=163 silicone hydrogel wearers)

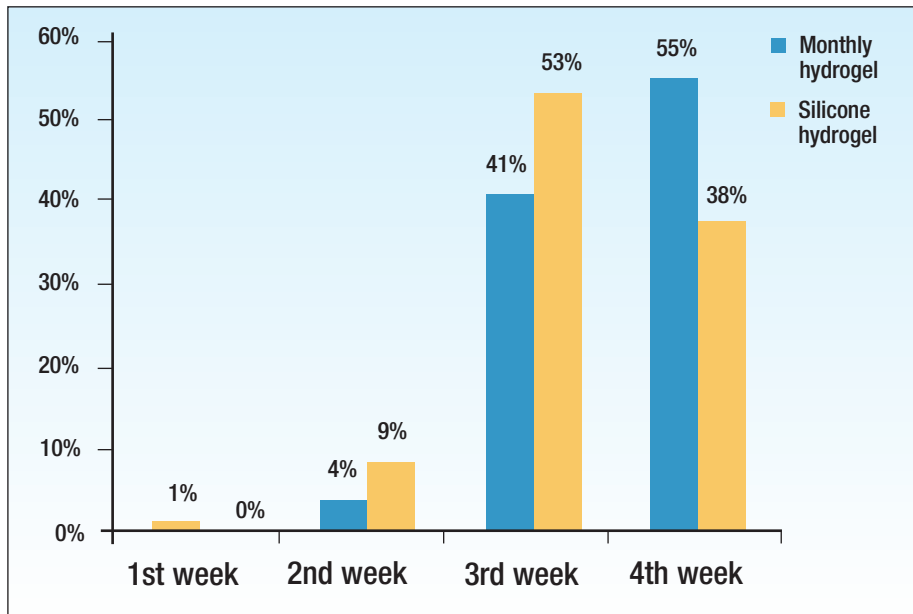


Figure 2: On average, in which week of the month do you in general start to notice discomfort? Question asked to those who noticed a decrease in wearing comfort over the month (N=183 monthly hydrogel wearers, N=115 silicone hydrogel wearers)

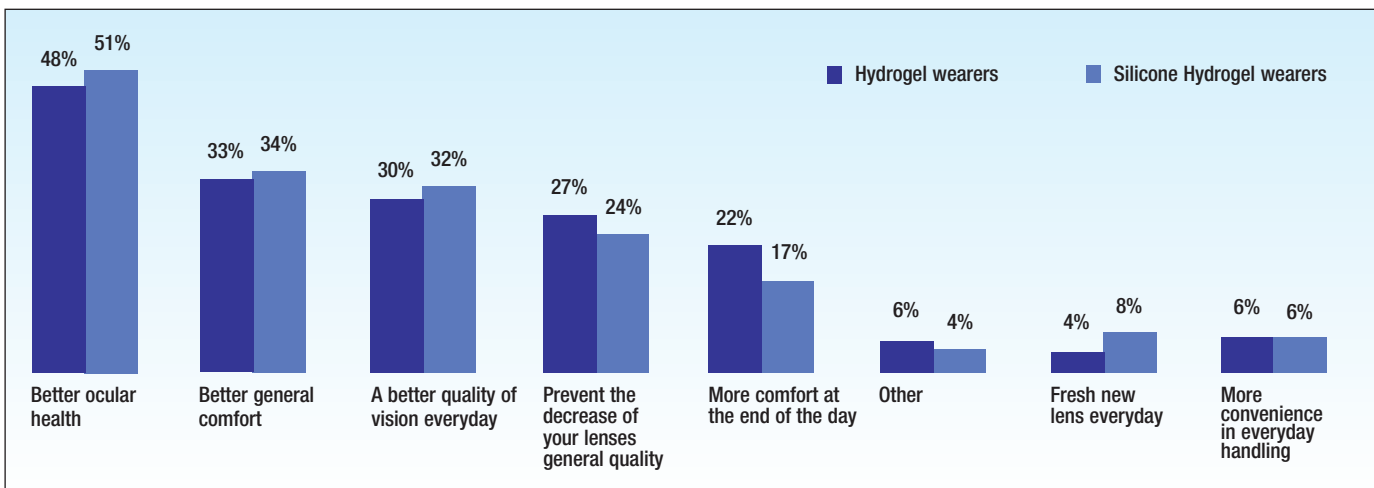


Figure 3: Which is the primary and secondary reason why you would be willing to pay more for contact lenses (N=271 monthly hydrogel wearers, N=163 silicone hydrogel wearers)

More evidence that health arguments can be effective when encouraging monthly wearers to upgrade emerges when asked to state the main reasons why they would be willing to pay more for contact lenses. Better ocular health scores highest among users of both lens types, cited by around half of all wearers (Figure 3), followed by better comfort in general and better quality of vision.

Desire for communication

The survey found that most monthly replacement wearers are receptive to the idea of upgrading to lenses offering improved performance and would be willing to pay. Their perceptions of the practitioner's role in communicating the benefits of new products are also revealing.

When asked whether wearers would like their practitioner to keep them regularly informed about new lenses on the market, more than eight out of 10 (85%) say they would like this for lenses that might improve their ocular health and an even higher proportion (90%) expect these lenses to be recommended to them.

The vast majority of monthly replacement lens wearers wanted information on lenses that might improve comfort, although somewhat less than information on improving ocular health, and again there were differences between lens types. More SiH than hydrogel wearers wanted to hear about new, more comfortable lenses (78% vs. 72%), and this difference was statistically significant ($P<0.05$). There were still more than eight out of 10 wearers overall (81%) who expected their practitioner to recommend an upgrade on comfort

grounds. A similar proportion (77%) say would like their ECP to show them the latest contact lens innovations as well as checking their eyes regularly.

Despite the high value that monthly replacement lens wearers place on proactive communication and their desire for information and advice, only half of the hydrogel users (53%) believe their practitioner keeps them regularly informed about new lenses entering the market. Those wearing SiH lenses are more likely to feel well informed; two thirds (67%) say they receive such information on a regular basis (the difference from hydrogel wearers is statistically significant, ($P<0.05$). Yet one in three monthly SiH wearers still believes their professional is not very good at informing them about new products.

The survey also demonstrates the importance of adopting a proactive approach to discussing lens innovations from a business point of view, as well as for health and comfort reasons. Three quarters say they would consider seeing their practitioner more frequently if he or she would proactively propose lenses that would give them better comfort. Hydrogel wearers are more likely than SiH wearers to attend more frequently under these circumstances.

Having their practitioner show them the latest contact lens innovations that enhance comfort also drives patient satisfaction. Around nine out of 10 (91%) say they are more satisfied when their practitioner shows them these innovations. Asked to choose which criteria would increase their loyalty towards their practitioner, almost seven out of 10 monthly replacement wearers (69%) cite being offered a

better lens for their ocular health and just over half (52%) opt for more comfortable lenses as making them more loyal.

Our findings suggest that practitioner have an opportunity to forge a more durable and reliable relationship with these patients by proactively communicating the benefits of new products and that this approach can be beneficial to their businesses too.

Informing future strategies

So what can be learnt from the survey results and how can practitioners use them to inform their practice strategies?

The findings show that monthly replacement contact lens wearers notice a decline in lens performance in weeks three and four of wear and that monthly SiH wearers experience the same sensation of growing discomfort over the course of a month as do hydrogel wearers. There are also opportunities to upgrade monthly lens wearers to new products and different modalities that will provide more comfort than their current lenses if for no other reason that the lenses are replaced more frequently. It is therefore important for practitioners to ask all their monthly wearers whether they experience sustained comfort to the end of the recommended replacement cycle of their lens.

A large-scale study of lens wear and care habits across Europe has shown that UK contact lens wearers are equally compliant in replacing their lenses as directed by their practitioner whether they are wearing two-weekly or monthly replacement lenses.⁴ The current survey indicates that if monthly replacement wearers

discarded their lenses at two-weekly intervals they would experience less discomfort.

The survey also suggests that monthly replacement wearers recognise the benefits of replacing their lenses more frequently. When upgrading from monthly to two-weekly replacement, both comfort and health arguments are important, whereas patients are more likely to switch from monthly to daily replacement lenses for the feeling of a fresh new lens each day and to avoid using solutions.

Many studies support the choice of two-weekly over monthly replacement. A survey of more than 1,000 soft lens wearers found fewer symptoms of dryness and end-of-day discomfort with daily disposable and two-weekly replacement hydrogel lenses than with monthly hydrogels.⁵ Lenses replaced every two weeks provide improved patient comfort and satisfaction when compared to other, monthly lenses.⁶ Patient acceptance among existing monthly wearers and new wearers prescribed two-weekly lenses is high.⁷ Daily disposable lenses have been shown to have the lowest overall rate of contact lens-related complications of soft daily wear modalities.⁸ The contention that 'shorter is better' when it comes to soft lens replacement intervals is therefore well supported by the literature. Other authors have observed that the key to success with any individual patient is the ability to select the lens, replacement frequency and wearing modality that best meets his or her needs.⁹

Our findings also highlight opportunities for upgrading both monthly hydrogel wearers, as well as SiH monthly wearers, to lenses replaced more frequently to effectively improve comfort. The SiH group are as likely as the hydrogel wearers to experience discomfort and tend to notice it earlier in the lens cycle. The research found that monthly SiH wearers are more interested than monthly hydrogel wearers in hearing about new, more comfortable lenses.

A recent study has shown that refitting patients wearing hydrogel lenses with second-generation SiHs improves comfort significantly, allowing them to wear the lenses in challenging environments where their use of contact lenses had previously been limited.¹⁰ Refitting with these lenses has also been shown to alleviate many of the signs and symptoms commonly encountered with

conventional hydrogels.¹¹ The advent of the world's first daily disposable SiH provides practitioners with a further option to consider for upgrading patients.

This survey has demonstrated the desire of monthly replacement wearers for contact lenses that offer improved comfort and ocular health. Neither the requirement to replace lenses more frequently, nor cost, are barriers to patient interest in purchasing products with better performance. Monthly replacement wearers have a desire for information and advice, which is not always fully met. These patients value a proactive approach to contact lens innovations from their practitioners and practices can benefit as a result.

About the authors

Jeanne Frangie is Vice President for Gallileo Business Consulting, France. Silja Schiller is Market Research Manager at Johnson & Johnson Vision Care, Europe, Middle East & Africa where Lisa Ann Hill is Brand Director.

References

1. Morgan P and Efron N. Trends in UK contact lens prescribing 2008; *Optician* 2008; 235: 6154, 18-19.
2. Young G, Veys J, Pritchard N and Coleman S. A multi-centre study of lapsed contact lens wearers. *Ophthal Physiol Opt*, 2002; 22: 516-527.
3. Association of Contact Lens Manufacturers, UK Market Statistics Technical Summary, 2007.
4. Morgan P. The science of compliance: a guide for eye care professionals, 2008.
5. Jones L, Jones D and Simpson T. The impact of replacement frequency and care regime on subjective satisfaction with disposable/frequent replacement lenses. *Optom Vis Sci* 1999; 76:12s 172.
6. Malet F and Schnider C. Influence of replacement schedule and care regimen on patient comfort and satisfaction with daily wear frequent-replacement contact lenses *CLAO J* 2002; 28:3 124-7.
7. Sulley A and Meyler J. A comparison of patient satisfaction between monthly and two-weekly replacement. *Optician* 2001;222: 5817 20-6.
8. Suchecki JK, Ehlers WH and Donshik PC. A comparison of

Key points

- Monthly replacement contact lens wearers report a decline in lens comfort in weeks 3 and 4 of wear, a trend that is equally observed by those wearing both hydrogel and silicone hydrogels
- Eye care practitioners should question their monthly replacement contact lens wearers specifically on whether comfort performance meets their needs in 3rd and 4th weeks of wear
- Monthly replacement wearers would like improved lenses in terms of comfort and health and are willing to pay more for lenses that would provide this
- Having to change their lenses twice a week or daily is not a disincentive to most monthly replacement wearers to trying contact lenses that could offer better comfort and health.
- Monthly replacement wearers would like their practitioner to inform them of contact lens innovations
- There are benefits to the practice of a proactive approach in communicating innovation in frequency of visits, satisfaction with their practitioner and loyalty

contact lens-related complications in various daily wear modalities. *CLAO J* 2000; 26:204-213.

9. Schnider C and Meyler J. Soft contact lenses: past, present and future. *Optician* 2004; 227: 5945, 26-32.

10. Young G, Riley CM, Chalmers RL et al. Hydrogel lens comfort in challenging environments and the effect of refitting with silicone hydrogel lenses. *Optom Vis Sci* 2007;84:4 302-8.

11. Riley C, Young G and Chalmers R. Prevalence of ocular surface symptoms, signs, and uncomfortable hours of wear in contact lens wearers: the effect of refitting with daily-wear silicone hydrogel lenses (senofilcon a). *Eye Contact Lens* 2006;32:6 281-6.

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