Content available at: https://www.ipinnovative.com/open-access-journals

IP International Journal of Ocular Oncology and Oculoplasty

Journal homepage: https://ijooo.org/

Original Research Article

Contact lens adoption and associated knowledge among the general population of South Gujarat, India

Ankitkumar Sanjaykumar Varshney[1]*, Kartik P Thakor[1], Chetna Suresh Patel[1], Mahendrasinh Dolatsinh Chauhan[1]

[1]*Dept. of Optometry, Veer Narmad South Gujarat University, Surat, Gujarat, India*

ARTICLE INFO

Article history:
Received 25-08-2024
Accepted 07-10-2024
Available online 02-11-2024

Keywords:
Contact lenses
Vision correction
Awareness
Hygiene
Discomfort
Knowledge gaps

ABSTRACT

Background: Contact lenses have emerged as a popular alternative to spectacles, offering users enhanced vision correction, cosmetic appeal, and improved quality of life. However, awareness of contact lens care, hygiene, and complications remains a concern, particularly in regions with limited access to proper education on lens use. This study aimed to assess the level of knowledge, awareness, and practices related to contact lens use among the general population of South Gujarat, India.

Materials and Methods: A cross-sectional study was conducted using a structured online questionnaire administered to 1,500 participants. The questionnaire covered demographics, awareness of contact lens types, usage patterns, hygiene practices, and knowledge of potential complications. Data were analyzed using SPSS software, with chi-square tests used to determine statistical significance.

Results: The study revealed that 60% of participants had some awareness of contact lenses, but only 30% demonstrated "extreme" awareness. Most participants used contact lenses for vision correction (65%), followed by cosmetics (30%). Adherence to recommended hygiene practices was variable, with only 56% consistently using contact lens solutions. Furthermore, 21% of users experienced discomfort while wearing lenses, and the dropout rate within the first six months was 28%.

Conclusion: There are significant gaps in knowledge and adherence to contact lens care, especially among younger users. Educational interventions focusing on hygiene practices, replacement schedules, and proper lens care are crucial to reducing complications and improving user experience.

1. Introduction

Refractive errors are common visual impairments that affect the eye's ability to focus light accurately on the retina, resulting in conditions such as myopia, hyperopia, and astigmatism. Spectacles have long been the dominant method for correcting these errors, providing effective improvement in visual performance.[1] However, contact lenses have become a popular alternative, offering advantages such as enhanced cosmetic appeal and an improved quality of life, especially for individuals who find spectacles limiting or undesirable.[2] Contact lenses, whether corrective, cosmetic, or therapeutic, are placed directly on the cornea, providing clearer vision without the bulk of glasses. These lenses allow for a wider field of view, less image distortion, and increased comfort for users engaged in sports or physical activities.[3]

The global prevalence of contact lens use has increased significantly in recent decades. For example, a population-based survey in the United States revealed that approximately 4.9 million people opted for contact lenses.[4–6] Similarly, in the United Kingdom, the number of contact lens wearers rose from 1.6 million in 1992 to 3.7

* *Corresponding author*.
E-mail address: ankitsvarshney@yahoo.com (A. S. Varshney).

https://doi.org/10.18231/j.ijooo.2024.027

million by 2016.[7] Countries such as Saudi Arabia, the USA, and Japan have also seen substantial increases in contact lens adoption, with prevalence rates ranging from 17% to 70%.[7]

Despite their benefits, contact lenses present challenges related to hygiene and maintenance, which, if not adequately managed, can lead to complications such as microbial keratitis and other infections. Research indicates that up to 80% of complications arising from contact lens use are attributed to poor compliance with recommended care guidelines.[8] Inadequate hygiene, such as failure to clean lenses properly or improper storage, can introduce microbial contaminants that lead to severe conditions affecting the cornea.[9] These risks are exacerbated in tropical climates, where environmental factors encourage microbial growth. Therefore, the need for proper evaluation, education, and regular follow-up for contact lens users is critical.[10]

While there is considerable awareness regarding the use of spectacles, studies have shown resistance among spectacle wearers to switch to contact lenses due to concerns about hygiene and potential complications. Overcoming this resistance requires targeted educational efforts that address these concerns, encourage proper lens care, and dispel misconceptions.[11] In regions like Pakistan, where unique climatic and cultural factors may pose additional challenges, the need for tailored research into contact lens adoption and care practices is particularly urgent.[5] By focusing on these under-researched regions, this study aims to highlight the critical gaps in understanding the barriers to contact lens usage and provide recommendations for enhancing awareness and adherence to safe lens practices.

This study seeks to assess the general population's awareness and knowledge regarding contact lens use, with a focus on identifying knowledge gaps and promoting better practices to prevent complications. With technological advancements in contact lens materials and designs, there is an increasing need to ensure that users are equipped with the knowledge required to use them safely and effectively. Understanding these factors will contribute to reducing the burden of contact lens-related complications and improving overall ocular health.

2. Materials and Methods

This cross-sectional study was conducted using a structured questionnaire to assess public awareness, knowledge, and practices related to CL use.

A validated, structured online questionnaire was used. The questionnaire comprised both open-ended and closed-ended questions, covering demographics, awareness of CL types, hygiene practices, usage patterns, and knowledge of potential complications.

A total of 1,500 participants were recruited from the general population of South Gujarat, India. Participants varied in age, gender, and educational levels. Recruitment was done via online platforms, and informed consent was obtained from all participants.

2.1. Questionnaire content

1. Demographics: Age, gender, education, occupation, and marital status.
2. Awareness: General knowledge of contact lenses, reasons for use, and knowledge of CL types.
3. Attitudes and Preferences: Comfort levels with CLs, concerns about risks, and brand preferences.
4. Knowledge and Practices: Understanding of hygiene practices, cleaning routines, and complications.
5. Usage Patterns: Frequency of use, duration of wear, and replacement schedules.

The questionnaire was administered via Google Forms between August 2023 and May 2024. All responses were recorded electronically, and data were stored securely.

Data were analyzed using SPSS software, and chi-square tests were used to assess the statistical significance of key findings. Results were presented as percentages, and p-values < 0.05 were considered significant.

Ethical approval was obtained from the institutional review board, and confidentiality was maintained for all participants.

3. Results

3.1. Demographic data

Of the 1,500 participants, 920 (61%) were female, and 580 (39%) were male (Table 1). The age distribution showed a significant skew toward younger individuals, with 79% of participants aged between 18-24 years (Table 2). This suggests a preference for contact lenses among younger demographics, possibly due to aesthetic appeal and independence from spectacles. To assess the statistical significance of the observed gender distribution, a chi-square test was conducted. The results indicate that the observed distribution is significantly different from a uniform distribution (Chi-square: 287.04, p-value < 2.2e-16). This suggests that there is a statistically significant difference in the proportion of males and females in the sample.

3.2. General awareness of contact lenses

A majority of participants (60%) demonstrated general awareness of contact lenses, although only 30% could be classified as "extremely aware." This highlights a gap in knowledge that underscores the need for more targeted educational campaigns, particularly to inform the public about the benefits, uses, and proper care of contact lenses (Figure 1).

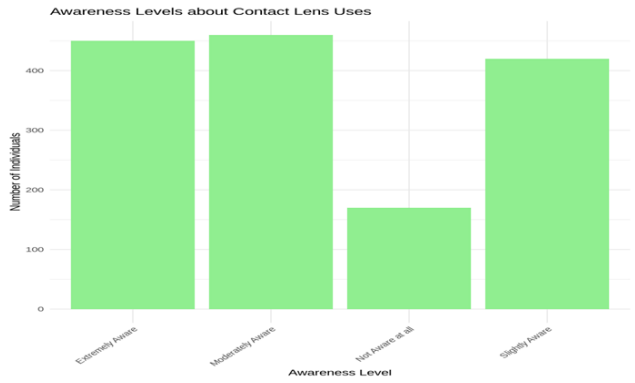

Figure 1: Awareness levels about contact lens uses

3.3. Contact lens usage purposes

Contact lenses were recognized for their versatility by 65% of participants, primarily for vision correction, followed by cosmetic and prosthetic applications. This emphasizes the multi-functional appeal of contact lenses, though a more detailed understanding of their therapeutic applications remains limited among the general population.

3.4. Familiarity with contact lens materials and designs

Despite the widespread use of contact lenses, nearly half of the participants (49%) were unaware of different lens materials and designs. Among those familiar with lens types, soft silicone hydrogel lenses were the most common, followed by soft hydrogel lenses, with rigid gas permeable (RGP) lenses being less prevalent. This gap in knowledge may contribute to improper selection and usage, potentially leading to complications (Table 3).

3.5. Contact lens brands and solutions

Bausch & Lomb and Johnson & Johnson emerged as the most popular brands among users, with Biotrue being the preferred solution for lens care. However, a significant portion of participants (42%) were either not using contact lenses or were unaware of available solutions, indicating limited market penetration or inadequate information about options(Table 3).

3.6. Wearing modality and duration

Participants exhibited a range of lens-wearing patterns. Daily disposable lenses were used by 16%, while weekly, bi-weekly, and monthly lenses were chosen by 11%, 6%, and 18%, respectively. Furthermore, 8% of users opted for extended wear lenses. The duration of contact lens use also varied, with 28% having used lenses for less than six months, and only 6% reporting usage for over two years.

3.7. Hygiene practices and awareness of side effects

Adherence to proper hygiene varied. While 66% of participants consistently removed their lenses before sleeping and 57% before swimming, only 43% were highly aware of the potential side effects associated with improper lens care. This discrepancy indicates a need for better education regarding both hygiene practices and the risks of complications, such as microbial infections.

3.8. Contact lens-related symptoms

Despite the high level of overall satisfaction reported by 80% of participants, 21% experienced some form of discomfort, including dryness and irritation. These symptoms suggest that fitting, material selection, and care routines require closer attention to prevent dropout due to discomfort. In fact, 28% of participants discontinued lens use within six months, highlighting the need for improved guidance on proper lens care and usage.

4. Discussion

This study provides valuable insights into the awareness, practices, and experiences of contact lens users in South Gujarat, India. Investigating contact lens awareness, usage patterns, and care practices among 1500 participants, the findings offer valuable insights for eye care professionals, contact lens manufacturers, and health educators.

The study found a significant skew towards younger adults (79% aged 18-24) using contact lenses, which aligns with the desire for independence from spectacles and potential cosmetic benefits, Younger adults and those with more frequent changes of spectacles are more likely to know about contact lenses.

Table 1: Gender distribution ofparticipants

Gender	Count	Percentage
Male	580	39%
Female	920	61%
Total	1500	100%

Table 2: Age distribution ofparticipants

Age group	n	Percentage %
18-24	1180	79
25-30	260	17
31-35	0	0
36-40	30	2
41-45	0	0
Above 45	30	2

Table 3: Participants' information regarding CL use

Questionnaire	n	%
1. How much aware are you about the uses of contact lens?		
o Not Aware at all	170	12%
o Slightly Aware	420	28%
o Moderately Aware	460	30%
o Extremely Aware	450	30%
2. According to you which are the purpose of the contact lens?		
o Cosmetics (to change the eye colour)	90	6%
o Optical (Refractive correction)	270	18%
o Prosthetic (to hide the abnormality of an eye)	60	4%
o All of them	980	65%
o None	100	7%
3. Out of all usages of contact lens, which purpose you are wearing contact lens?		
o Cosmetic purpose (to change the eye colour)	250	17%
o Optical purpose (Refractive correction)	450	30%
o Prosthetic purpose (to hide the abnormality of an eye)	70	46%
o All of them	230	15%
o None	490	33%
4. Which type of contact lens material do you use?		
o Soft Hydrogel	220	15%
o RGP	170	11%
o Soft Silicone Hydrogel	450	30%
o I don't know	660	44%
5. Which type of contact lens design are you using?		
o Spherical	460	31%
o Toric	200	13%
o Multifocal	30	2%
o Toric Multifocal	0	0%
o None	810	54%
6. Which company brand are you using?		
o Bausch and Lomb	300	20%
o Acme	70	5%
o Cooper Vision	130	9%
o Johnson and Johnson	210	14%
o Other	160	11%
o None	630	42%
7. What type of contact lens solutions are you using?		
o Bio True contact lens	290	19%
o Renu contact lens solutions	170	12%
o Opti-free contact lens solutions	80	5%
o All-in-one contact lens solutions	190	13%
o Other	150	10%
o None	620	41%
8. How often do you dispose your contact lens?		
o Every Day	240	16%
o Once in a week	160	11%
o Once in a 15 Day	100	6%
o Once in a 30 Day	270	18%
o Once in a 180 Day	110	73%
o None	620	41%
9. Since how many days/months have you been using contact lenses?		

Continued on next page

Table 3 continued

o Less than 6 months ago	410	27%
o >24 months ago	90	6%
o 6-12 months ago	150	10%
o 12-24 months ago	130	9%
o Not in use	720	48%
10. How often do you wear your contact lenses?		
o Never	610	40%
o Rarely	280	19%
o Sometimes	450	30%
o Often	80	5%
o Always	90	6%
11. Do you remove your contact lenses before sleeping?		
o Not a wearer	310	21%
o Rarely	30	2%
o Sometimes	50	3%
o Always	110	8%
o Often	1000	67%
12. Do you remove your contact lenses before swimming or other activities?		
o Not a wearer	340	23%
o Rarely	70	5%
o Sometimes	100	6%
o Always	130	9%
o Often	860	58%
13. Do you use contact lenses after the expiry date?		
o Yes	200	13%
o No	1300	87%
14. How do you take care of your contact lenses?		
o Using the provided solution	840	56%
o Wash with water	50	3%
o Always change overnight	120	8%
o Don't clean regularly	90	6%
o With saliva	20	1%
o I Don't Know/None	380	25%
15. Are you aware of contact lens hygiene before wearing?		
o Much Aware	640	42%
o Aware	420	28%
o Somewhat Aware	140	10%
o Little bit Aware	40	3%
o Not Aware	260	17%
16. Are you aware of possible contact lens side effects?		
o Much Aware	480	32%
o Aware	460	30%
o Somewhat Aware	110	7%
o Little bit Aware	140	9%
o Not Aware	310	21%
17. Did you ever feel discomfort while using contact lenses?		
o Very Discomfort	110	7%
o Discomfort	140	10%
o Neutral	380	26%
o Comfort	240	16%
o Very Comfort	120	8%

Continued on next page

Table 3 continued		
o None	510	34%
18. Symptoms faced due to contact lens?		
o Discomfort	140	10%
o Redress	180	12%
o Pain	40	3%
o Watering	350	23%
o None	790	56%
19. Did you suffer eye problems due to contact lenses?		
o Never	700	46%
o Rarely	340	23%
o Sometimes	300	20%
o Always	50	3%
o Often	110	8%
20. Did you suffer an allergic reaction due to contact lenses?		
o Never	1000	67%
o Rarely	250	16%
o Sometimes	150	10%
o Often	40	3%
o Always	60	4%
21. For eye checkup related to contact lenses, whom do you consult?		
o Optometrist	580	39%
o Ophthalmology	320	21%
o Home remedies	30	2%
o Optician	70	5%
o Ignore	80	5%
o None	420	28%

Additionally, the study found a female predominance (61%) in contact lens wearers, consistent with findings by Giri et al. (2012)[12] who reported 85% female users. Furthermore, the study by Abuallut et al. (2021)[13] in Saudi Arabia provides further evidence of the gender disparity in contact lens knowledge, with females exhibiting higher levels of understanding.

This study revealed mixed adherence to recommended hygiene protocols among contact lens users. While a significant portion of participants (79%) removed their lenses before sleeping and swimming, 21% engaged in behaviors that increased their risk of infection. Notably, only 56% consistently used contact lens solutions, underscoring the need for better education on proper lens care. These findings are consistent with Abuallut et al. (2021),[13] who reported 94% solution usage, but also highlighted that some participants used water (2%) or did not use lenses at all (4%). Further, only 8% of participants regularly changed their overnight soaking solution, and 6% did not clean their lenses consistently. These statistics emphasize the need for targeted educational interventions to promote safe contact lens hygiene practices, aligning with Kumari et al. (2022),[14] who stressed the importance of education to reduce complications.

The study identified a significant gap in contact lens awareness, with 40% of participants lacking basic knowledge about their use. This is slightly higher than the 34% unawareness reported by Shaik et al. (2021),[15] suggesting that contact lens education remains insufficient in many regions. Regarding usage, only 5% of participants used lenses for therapeutic reasons, while 30% and 17% used them for vision correction and cosmetic purposes, respectively. This distribution may be influenced by regional demographics, socio-economic factors, or specific eye conditions prevalent in the study population.

Despite 80% of participants reporting no eye problems, a notable 21% experienced discomfort, including dryness, irritation, or watering while wearing lenses. Such discomfort likely contributed to the high dropout rate, with 28% of users discontinuing lens use within six months, consistent with the findings of Abuallut et al. (2021),[13] who reported similar issues with discomfort in 62% of users. These findings suggest that discomfort remains a significant barrier to long-term lens usage, further highlighting the importance of addressing fit, material, and care routines in contact lens education programs.

A significant portion of participants (43%) lacked awareness of the materials used in their contact lenses, with silicon hydrogel (30%), soft contact lenses (15%), and rigid gas permeable (RGP) lenses (12%) being the most popular choices. This lack of knowledge mirrors the findings of Albasheer et al. (2024),[11] who emphasized the need for informed decision-making in selecting contact lenses based on material properties. The study also revealed varying replacement schedules, with 16% using daily disposable lenses and 18% using monthly disposables. However, a smaller subset replaced their lenses every six months, a practice that deviates from manufacturer recommendations and could contribute to hygiene issues. This suggests that cost concerns or lack of awareness regarding replacement schedules are common, as noted by Ramos-Dávila et al. (2024),[16] who found poor compliance with recommended replacement routines in Northeast Mexico.

Our study found a significant dropout rate within the first year of contact lens use, with 28% of participants discontinuing use within six months. This is higher than the rate reported by Abuallut et al. (2021),[13] who found a much lower dropout rate of less than 6%. The discrepancy highlights the need to investigate factors leading to early discontinuation, such as discomfort, improper lens handling, or lack of proper guidance.

When seeking help for contact lens-related issues, most participants consulted optometrists (39%), while a smaller group visited ophthalmologists (22%). This suggests that many users may not fully understand the roles of different eye care professionals. Clearer communication and education about which professional to consult for specific issues could improve help-seeking behavior and ensure appropriate management of contact lens complications.

As reported by several studies, barriers to contact lens use are prevalent across various populations. Common issues include a lack of interest, insufficient knowledge about lens care, and fear of side effects (Sadiq et al., 2023;[17] Albasheer et al., 2024.[11] Younger users in particular, who tend to have better awareness, may still struggle with compliance due to poor insertion/removal techniques and discomfort (Kumari et al., 2022).[14] Our findings corroborate these trends, suggesting that targeted educational interventions are crucial to improving hygiene practices and ensuring safer usage.

Given the significant gaps in hygiene practices, awareness, and understanding of contact lens materials and replacement schedules, it is clear that educational interventions are urgently needed. Similar to the recommendations made by Kumari et al. (2022),[14] educational programs should focus on proper care routines, lens handling, and the importance of compliance with replacement schedules to reduce complications and ensure safe usage.

In addition, the study identified a gap in understanding among participants regarding the role of different eye care professionals. Most sought help from optometrists for contact lens-related issues, but some were unsure whether to consult an optometrist or ophthalmologist, indicating a need for better education on the appropriate channels for seeking help.

Our study reveals that, despite moderate awareness of contact lens use, significant gaps in hygiene practices,

materials knowledge, and compliance with recommended care persist. Educational initiatives are essential to improving these practices and should be tailored to address specific barriers such as cost concerns, fear of side effects, and lack of information. Special attention should be given to younger users and those new to contact lens use, as they are at a higher risk of discontinuing use prematurely due to discomfort or insufficient guidance.

5. Conclusion

The study reveals several key insights into the adoption and use of contact lenses in South Gujarat. While awareness of contact lenses is moderately high, significant gaps remain in the knowledge of lens materials, care practices, and potential side effects. Younger individuals and females are the primary users, driven by aesthetic preferences and a desire for freedom from spectacles. However, poor hygiene practices and a lack of awareness of complications pose significant risks to ocular health. The high dropout rate within six months of lens use further highlights the need for improved education and guidance to ensure users can enjoy the benefits of contact lenses without discomfort or complications.

This study emphasizes the need for targeted educational programs to address gaps in contact lens knowledge and hygiene practices. Eye care professionals should play a more active role in educating users about proper lens care, the risks of non-compliance, and the importance of regular follow-ups. By addressing these gaps, it may be possible to reduce the incidence of complications and improve the long-term adoption of contact lenses among the population.

6. Limitation

This study has several limitations that should be considered when interpreting the results. First, the cross-sectional design provides a snapshot of contact lens usage and practices at a single point in time, limiting the ability to assess changes in behaviour or knowledge over time. A longitudinal study could provide deeper insights into how knowledge and practices evolve with continued lens use.

Second, the sample was limited to South Gujarat, and thus the findings may not be generalizable to other regions of India or countries with different cultural, socioeconomic, or environmental contexts. Future research should aim to include a more diverse population to allow for broader generalization.

Lastly, the reliance on self-reported data introduces the potential for bias, as participants may have underreported poor hygiene practices or exaggerated their knowledge of contact lenses. Future studies could incorporate objective measures of compliance and knowledge to provide more accurate assessments.

7. Ethical approval

This study was conducted after taking approval from the Ethical Committee of the Institute (ref. No. BCOPT/357/2024).

8. Conflict of Interest

The authors report no conflicts of interest.

9. Source of Funding

None.

References

1. Maduka-Okafor FC, Okoye O, Ezegwui I, Oguego NC, Okoye OI, Udeh N, et al. Refractive Error and Visual Impairment Among School Children: Result of a South-Eastern Nigerian Regional Survey. *Clin Ophthalmol*. 2021;15:2345–53. doi:10.2147/OPTH.S298929.
2. Pillay R, Hansraj R, Rampersad N. Historical Development, Applications and Advances in Materials Used in Spectacle Lenses and Contact Lenses. *Clin Optom (Auckl)*. 2020;12:157–67. doi:10.2147/OPTO.S257081.
3. Unnikrishnan B, Hussain S. Pattern of use of contact lens among college students: a cross-sectional study in coastal Karnataka. *Indian J Ophthalmol* . 2009;57(6):467–9.
4. Cope JR, Collier SA, Rao MM, Chalmers R, Mitchell GL, Richdale K, et al. Contact Lens Wearer Demographics and Risk Behaviors for Contact Lens-Related Eye Infections–United States. *MMWR Morb Mortal Wkly Rep*. 2014;64(32):865–70.
5. Ibrahim NK, Seraj H, Khan R, Baabdullah M, Reda L. Prevalence, habits and outcomes of using contact lenses among medical students. *Pak J Med Sci*. 2018;34(6):1429–34.
6. Bashir M, Alghamdi AH, Ahmed AAE, Taishan SS, Taishan WS, Alghamdi MG. The Prevalence of Contact Lens Wear and Improper Use Among Students of Al-Baha University, Saudi Arabia. *Open Ophthalmol J*. 2024;doi:10.2174/0118743641306553240313061238.
7. Thite N, Desiato A, Shinde L, Wolffsohn J, Naroo SA, Santodomingo-Rubido J, et al. Opportunities and Threats to Contact Lens Practice: A Global Survey Perspective. *Cont Lens Anterior Eye*. 2021;44(6):101496. doi:10.1016/j.clae.2021.101496.
8. Waghmare SV, Jeria S. A Review of Contact Lens-Related Risk Factors and Complications. *Cureus*. 2022;14(10):e30118. doi:10.7759/cureus.30118.
9. Maurya R, Bhushan P, Singh VP, Singh MK, Kumar P, Bhatia RPS, et al. Immunoglobulin concentration in tears of contact lens wearers. *J Ophthalmic Vis Res*. 2014;9(3):320–3.
10. Lievens CW, Cilimberg KC, Moore A. Contact lens care tips for patients: an optometrist's perspective. *Clin Optom (Auckl)*. 2017;9:113–21. doi:10.2147/OPTO.S139651.
11. Albasheer O, Gosadi IM, Abuallut I, Khawaji FF, Almalki AJ, Muqanna AK, et al. Awareness and Hygiene Practices Among Contact Lens Wearers: A Population-Based Cross-Sectional Survey. *Cureus*. 2024;16(2):e54723. doi:10.7759/cureus.54723.
12. Giri PA, Chavan WM, Phalke DB, Bangal SV. Knowledge and practice of contact lens wear and care among contact lens users medical students of rural medical college. *Int J Biol Med Res*. 2012;3(1):1385–7.
13. Abuallut I, Hakami AA, Alameer MI, Shami MO, Hakami NM, Khawaji AA, et al. Awareness of the Practice and Use of Contact Lenses amongst Students of the Health Faculty at Jazan University during the COVID-19 Pandemic. *J Pharm Res Int*. 2021;33(59B):371–82.
14. Sharma K, Kumari V, Malik A, Dilkash M, Gupta D. Knowledge and attitude on contact lens use among urban population of South Delhi-A questionnaire based study. *Indian J Clin Exp Ophthalmol*. 1;8:109–116.

15. Shaik RS, Samanthula BS, Pulivarthi SK, Adusumilli PK. Knowledge, Attitude and Practice of Contact Lens Users among South Indian Population. *Indian J Pharm Pract*. 2021;14(4):239–44.
16. Ramos-Dávila EM, Ruiz-Lozano RE, Gutierrez-Juarez K, Rusque-Lavalle CM, Garza-Villarreal P, Nacif-Lopéz F, et al. Knowledge and compliance with contact lens care: A population-based study at a referral center in Northeast Mexico. *Contact Lens Anterior Eye*. 2024;47(2):102126. doi:10.1016/j.clae.2024.102126.
17. Sadiq M, Ayub F, Ali KN. Knowledge and barriers associated with contact lens use among spectacle wearers. *Khyber Med Univ J*. 2023;15(4):247–53.

Author's biography

Ankitkumar Sanjaykumar Varshney, Associate Professor
https://orcid.org/0009-0007-2427-6342

Kartik P Thakor, Student

Chetna Suresh Patel, Professor

Mahendrasinh Dolatsinh Chauhan, Principal

Cite this article: Varshney AS, Thakor KP, Patel CS, Chauhan MD. Contact lens adoption and associated knowledge among the general population of South Gujarat, India. *IP Int J Ocul Oncol Oculoplasty* 2024;10(3):140-148.