

Evaluating the Awareness and Knowledge of Cataract among Digitally Connected Adults in Northern Saudi Arabia: A Cross-sectional Study

MOHAMED M ABD EL-MAWGD¹, MUJEEB UR REHMAN PARREY², ASSEEL FARHAN K ALANAZI³, ABDELRAHMAN RAKA A ALANAZI⁴, ABDULRAHMAN BADER N ALENEZI⁵, RASHED SATAM B ALSHAMMARI⁶, AHMAD YOUSEF A ALENEZI⁷, ABDULAZIZ HUSSAIN ALI ALANAZI⁸



ABSTRACT

Introduction: Cataract is one of the most common causes of vision loss, particularly in older adults, due to clouding of the eye lens. It is a complex illness that can develop from genetic, environmental, behavioural, and medical conditions.

Aim: To assess awareness of cataract among a convenience sample of digitally connected adults.

Materials and Methods: A cross-sectional study was conducted among a convenience sample of digitally connected adults in Arar City, Northern Saudi Arabia, the field practice area of the Medical College of Northern Border University, between May and December 2024. An online survey using a structured self-administered questionnaire was used as a data collection tool to assess awareness and knowledge of Cataract among the study population. Chi-square (χ^2) and Fisher's exact tests

were used as the primary significance tests. A p-value < 0.05 was considered significant.

Results: The survey included 372 participants with a mean age of 32.5 ± 11.8; the majority, 303 (81.5%), accurately identified cataract disease. Almost all respondents were aware that cataract causes visual impairment, 339 (91.1%). The most often stated risk factors for cataract were Diabetes Mellitus (DM), 287 (77.2%), and ageing, 278 (74.7%). The majority of participants agreed that cataract is curable, with surgery being the most often mentioned treatment option 335 (90.1%).

Conclusion: Cataract awareness was generally high. Compared to female participants, male participants exhibited a significantly higher level of awareness regarding cataract inheritance and the congenital origin of the condition.

Keywords: Digitally active, Risk factors, Vision loss

INTRODUCTION

Cataract is one of the most frequent causes of poor vision and among the leading causes of avoidable ocular blindness. It begins as a progressive opacification of the crystalline lens of the eye and gradually deteriorates until it causes visual impairment for the affected individual [1]. Cataract is caused by a variety of factors, including behavioural, environmental, genetic, and socio-demographic ones. Additionally, smoking, radiation exposure, DM, and ocular injury are regarded as risk factors for the illness [2,3]. Numerous factors have been found to affect awareness of ocular problems, including age, gender, educational level, economic status, geography, religion, and place of residence [4]. In a country like Canada, 69.2% of those surveyed reported that cataract can cause blindness, and the majority reported that cataract can be treated [5].

A systematic review conducted in Saudi Arabia reported that the Saudi community has a high degree of knowledge regarding cataract. The areas of insufficient awareness include symptoms, potential risk factors, and treatment choices. These areas must be managed correctly with educational initiatives [6]. According to a survey conducted in the Asir region of southern Saudi Arabia, most of the participants were aware that cataract is an eye condition, and slightly less than half accurately described it as a clouding of the lens. Ageing and family history were the most often cited risk factors, and the majority agreed that cataract can be treated surgically [7]. Furthermore, a survey carried out in the southern Saudi Arabian province of Jazan revealed that more than half of the respondents accurately described cataract as an opacity of the eye lens. Risk factors for the condition were identified by 66.2%,

62.2%, 49.9%, 42.9%, and 39.2%, respectively, as increased age, DM, ocular trauma, Ultraviolet radiation (UV), and hereditary factors. Furthermore, around two-thirds of respondents thought that a cataract could be surgically corrected [8].

Another study conducted in Bisha, Southwestern Saudi Arabia, revealed that a small proportion of participants correctly defined cataract. DM was the most frequently cited risk factor, followed by increased age and family history [9]. In Hail, Northern Saudi Arabia, another survey revealed that around one-third of respondents accurately identified cataract. The most generally reported risk factor was old age, followed by DM and UV [10]. Furthermore, according to a survey conducted in the same area by Alshammari F et al., 31%, 26.3%, and 20.3% of participants were aware that ageing, DM, and hereditary conditions are risk factors for cataract illness, respectively [4]. Diabetes was shown to be the most significant risk factor for cataract in Qassim province, Saudi Arabia followed by ageing and smoking [11].

An observational study done in Makkah, western Saudi Arabia, reported that most of the respondents were not aware of the correct definition of cataract, that the condition can cause blindness, that it is hereditary, that ageing is a risk factor, and that the disease can be surgically managed [12]. A study among the general community of Jeddah, Saudi Arabia, reported that most participants had heard of cataracts, around one-third properly defined the condition, and three-quarters agreed that it is treatable [13].

In Riyadh, Saudi Arabia, <30% of diabetic patients accurately identified cataract disease. DM was cited as the most common risk factor, slightly less than two-thirds indicated that the condition is treatable, and about one-quarter believed that surgery is the

best treatment option [14]. According to a Jordanian study, slightly less than one-third of participants were familiar with cataract disease, ageing is a risk factor, and about one-fifth claimed that family history is a risk factor [15]. In a Malaysian survey, most of the participants were aware of cataract disease, properly identified the disorder, and roughly three-quarters agreed that the disease can be treated [16]. A lack of awareness about prevention or a delay in seeking medical attention for eye conditions like cataract can lead to blindness [15]. The present research aimed to assess the awareness of cataract and related risk factors among an adult population in Arar city, Northern Saudi Arabia.

MATERIALS AND METHODS

A cross-sectional study was conducted in Arar City, the capital of Northern Saudi Arabia, the field practice area of the Medical College, Northern Border University, between May 2024 and December 2024. The study was approved by Northern Border University's local bioethical committee (HAP-09-A-043), no (49/24/H) at 7-5-2024.

Inclusion criteria: Saudi participants aged ≥ 18 years residing in Arar, Saudi Arabia, who provided informed consent and digitally connected adults were included in the study.

Exclusion criteria: Temporary residents, healthcare professionals, individuals younger than 18 years, and those who declined participation were excluded from the study. The age threshold was chosen to ensure legal capacity for consent and relevance to cataract awareness, which primarily affects adult populations.

Sample size: The sample size was calculated using the Epi Info software program (version 7.2.4.0). The inputs included an expected awareness level of 50%, a margin of error of 5%, and a confidence level of 95%. Based on these parameters, the estimated sample size was 384 participants.

$$n = Z^2 \cdot p(1-p) / d^2$$

n) = required sample size

(Z) = Z-score corresponding to the desired confidence level (for 95%, (Z = 1.96))

(p) = expected proportion (here, 0.5 for 50%)

(d) = margin of error (here, 0.05)

Thus, the required sample size was rounded to 384.

Study Procedure

The researchers prepared a structured self-administered questionnaire, based on a review of previous validated relevant literature, which was used as a data collection tool [7,17]. The study questionnaire was developed by two faculty members: one from the Department of Family and Community Medicine and the other from the Department of Ophthalmology. Both researchers were experienced academic staff with expertise in clinical practice and community-based research. It consisted of 21 questions and was divided into two parts: the first section contained socio-demographic data (age, gender, residence, education, occupation), while the second domain contained questions about cataract knowledge and awareness of cataract. The answers to the knowledge and awareness-related questions were (Yes, no, I don't know). The tool was first written in English, translated into Arabic, and then back into English using the forward-backwards method by two independent bilingual professors in the English language department, College of Arts, Northern Border University. Additionally, the final Arabic version was approved before use by the expert panel.

A pilot study was conducted for one week among 20 adults from the target population in Arar, Saudi Arabia, recruited through convenience sampling. The pilot assessed clarity of wording, cultural appropriateness, ease of completion, and average time required. Feedback was obtained through structured debriefing and open comments, leading to minor modifications in item

phrasing and questionnaire layout. No changes were made to the content domains. The pilot study was conducted under the same ethics approval, and its data were excluded from the final analysis

The content and construct validity of the questionnaire were reviewed and approved by a panel of ophthalmologists, family medicine specialists, and epidemiologists. The internal consistency of the tool was assessed using Cronbach's alpha, which yielded a coefficient value of 0.79, displaying the instrument's reliability.

An online survey (Using different social media platforms such as WhatsApp, Snapchat, and Facebook) was utilised for data collection, providing extensive access while maintaining respondent anonymity.

STATISTICAL ANALYSIS

Statistical analysis was carried out using Statistical Package for the Social Sciences (SPSS) version 22.0. Categorical variables were summarised as frequencies and percentages. Associations between categorical variables were tested using Chi-square (χ^2) or Fisher's exact tests, as appropriate. A p-value of <0.05 was considered statistically significant.

RESULTS

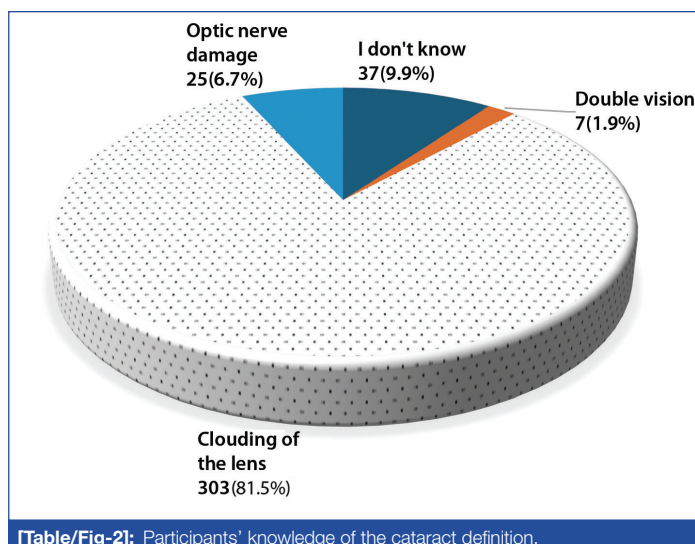
Initially, 384 participants were included; 12 participants were eliminated for providing incomplete responses, resulting in a response rate of 96.9%.

The survey included 372 respondents with a mean age of 32.5 ± 11.8 years, range (18-65 years), and over half, 211 (56.8%), were between the ages of 18 and 30 years. Slightly more than half were female, 188 (50.5%), with the majority, 307 (82.5%), with university education, and 165 (44.4%) were students. A little more than half sought medical counsel only after their vision was impaired, 194 (52.2%); all had heard of cataract illness, and only a tiny fraction had previously been diagnosed with cataract 22 (5.9%) [Table/Fig-1].

Parameter		n (%)
Age (years)	18-30	211 (56.8)
	31-40	44 (11.8)
	41-50	98 (26.3)
	≥ 50	19 (5.1)
Gender	Male	184 (49.5)
	Female	188 (50.5)
Education	Middle	11 (3.0)
	High school	54 (14.5)
	University	307 (82.5)
Employment	Student	165 (44.4)
	Government	156 (41.9)
	Private	17 (4.6)
	No Job	22 (5.9)
	Retired	12 (3.2)
How often do you do an eye check-up	Every 6 months	15 (4.0)
	Every year	48 (12.9)
	Every two years	24 (6.5)
	Every five years	11 (3.0)
	Only when my vision is affected	194 (52.2)
	Never	80 (21.5)
Ever heard of a cataract	Yes	372 (100)
Ever diagnosed with cataract	Yes	22 (5.9)
	No	350 (94.1)

[Table/Fig-1]: Socio-demographic characteristics of the respondents studied (n=372).

The majority of responders, 303 (81.5%), correctly identified cataract disease [Table/Fig-2].



Almost all respondents were aware that cataract affects the eye and causes visual impairment, 339 (91.1%); slightly less than half, 184 (49.5%) answered that cataract is a painless disease [Table/Fig-3]. The most often cited risk factor for cataract was DM 287 (77.2%), followed by ageing 278 (74.7%); hereditary 148 (39.8%); congenital 135(36.3%), and UV radiation exposure 120 (32.3%). The majority of participants agreed that cataract is curable, with surgery being the most often mentioned treatment option 335 (90.1%). Medications, contact lenses, and spectacles were stated by 92 (24.7%), 61 (16.4%), and 42 (11.3%) as treatment options for cataract, respectively.

Variables	Yes n (%)	No n (%)	I don't know n (%)
Cataract affects the eyes	339 (91.1)	0	33 (8.9)
A cataract causes visual impairment	339 (91.1)	5 (1.3)	27 (7.6)
A cataract causes pain	69 (18.5)	184 (49.5)	119 (32)
DM is a risk factor for cataract	287 (77.2)	19 (5.1)	66 (17.7)
Ageing is a risk factor for cataract	278 (74.7)	41 (11)	53 (14.3)
A cataract is a hereditary disease	148 (39.8)	81 (21.8)	143 (38.4)
A cataract can be congenital	135 (36.3)	47 (12.6)	190 (51.1)
Do you think UV light can cause cataracts?	120 (32.3)	41 (11)	211 (56.7)
Can a cataract be treated	335 (90.1)	3 (0.8)	34 (9.1)
A cataract can be treated surgically	335 (90.1)	13 (3.5)	24 (6.4)
Can a cataract be treated through medication	92 (24.7)	151 (40.6)	129 (34.7)
A cataract can be treated with contact lenses	61 (16.4)	213 (57.3)	98 (26.3)
A cataract can be treated with glasses	42 (11.3)	235 (63.2)	95 (25.5)

[Table/Fig-3]: Participants' awareness of cataract symptoms, related risk factors, and treatment options (n=372).

The awareness of cataract inheritance differs statistically significantly between male and female groups (47.8% versus 31.9%, p-value=0.006). There was also a statistically significant difference in awareness of cataract as a congenital disorder between the male and female groups (45.1% versus 27.7%, p-value=0.001) [Table/Fig-4]. There was no statistically significant difference in male and female awareness of the following risk factors: ageing, UV exposure, and DM.

DISCUSSION

In the current study on participants' awareness and knowledge of cataract, all respondents had heard of the condition, and the majority (81.5%) accurately defined it. These findings surpass

Variables	Male No (%) n=184	Female No (%) n=188	p-value
Definition of cataract			
Optic nerve damage	15 (8.2)	10 (5.3)	0.4*
A clouding of the lens	151 (82)	152 (80.9)	
Double vision	3 (1.6)	4 (2.1)	
I don't know	15 (8.2)	22 (11.7)	
A cataract causes visual impairment			
Yes	166 (90.2)	173 (92)	0.3*
No	4 (2.2)	1 (0.5)	
I don't know	14 (7.6)	14 (7.5)	
Ageing is a risk factor for cataract development			
Yes	137 (74.5)	141 (75)	0.9**
No	20 (10.9)	19 (11.2)	
I don't know	27 (14.6)	26 (13.8)	
Cataract is a hereditary disease			
Yes	88 (47.8)	60 (31.9)	0.006**
No	32 (17.4)	49 (26.1)	
I don't know	64 (34.8)	79 (42)	
UV exposure is a risk for cataract development			
Yes	65 (35.3)	55 (29.3)	0.1**
No	15 (8.2)	26 (13.8)	
I don't know	104 (56.5)	107 (56.9)	
DM is a risk for cataract development			
Yes	135 (73.4)	152 (80.9)	0.1**
No	12 (6.5)	7 (3.7)	
I don't know	37 (20.1)	29 (15.4)	
A cataract can be a congenital disease			
Yes	83 (45.1)	52 (27.7)	0.001**
No	25 (13.6)	22 (11.7)	
I don't know	76 (41.3)	114 (60.6)	
A cataract can be treated surgically			
Yes	162 (88)	173 (92)	0.4**
No	8 (4.3)	5 (2.7)	
I don't know	14 (7.7)	10 (5.3)	

[Table/Fig-4]: Association between cataract knowledge, awareness, and gender among the respondents studied.

*Chi-square test (χ^2) *Fisher's-exact test

those reported in previous studies from Saudi Arabia. For example, in western Saudi Arabia, 84.1% of participants were aware of cataract [13], while in Qassim only 44.1% correctly recognised it [11]. In Jazan, just over half (57.6%) identified the condition correctly [8], in Asir slightly less than half (47.6%) provided a correct definition [7], and in Hail only 36.5% defined cataract accurately [10]. Comparable research outside Saudi Arabia also reported lower levels of awareness: in Jordan, less than one-third (31.4%) were familiar with cataract [15]. By contrast, studies from Iraq (82%) [18], Iran (82.9% awareness, 57.3% correct definition) [19], the West Indies (98.3%) [20], Ethiopia (86.3% awareness, 77.5% citing ageing as a risk factor) [21], and Poland (83.6%) [22] reported higher awareness levels, aligning more closely with the present study results. Similarly, Alimaw YA et al., in Ethiopia found that 67.2% of participants knew about cataract [23], while in India, 77.6% were aware [24]. Regarding knowledge of cataract symptoms and risk factors, most participants in the present study cited visual impairment (91.1%) as a consequence. DM (77.2%) was the most frequently mentioned risk factor, followed by ageing (74.7%), hereditary factors (39.8%), congenital conditions (36.3%), and UV exposure (32.3%). These findings are consistent with AlOtaybi HF et al., who reported that 71.1% recognised visual loss

as a symptom, with DM (59.7%), genetic factors (56.3%), ageing (43.7%), and UV exposure (38.1%) as common risk factors [17]. In Hail, 77.5% identified vision impairment, with ageing (64.2%), DM (62.5%), trauma (61.6%), and UV (60.6%) cited as risk factors [10]. In Asir, 64.1% reported blindness as a consequence, with age (57.6%) and family history (88.6%) as risk factors [7]. In Jazan, blurred vision was identified by 64.9%, with UV exposure (66.2%), DM (62.2%), and ageing (42.9%) as risk factors [8]. In Bisha, DM (74.1%), advanced age (54.4%), and family history (47.5%) were most frequently reported [9]. Outside Saudi Arabia, Jordanian participants most often cited age (32%), systemic illness, and family history (20.7%) [15]. In Iran, 47.6% recognised cataract as a cause of visual loss [19]. In Ethiopia, older age, trauma, and UV exposure were reported by 35.7%, 35.2%, and 46.6%, respectively [23]. In China, 69.1% considered cataract a common condition in the elderly [25], and in Germany, 63.4% associated ageing with increased risk [26].

With respect to treatment knowledge, the majority of present study participants believed cataract is treatable and can be corrected surgically (90.1%). A quarter thought it could be managed with drugs, while smaller proportions mentioned contact lenses (16.4%) and eyeglasses (11.3%). Similar findings have been reported in Saudi Arabia. In Asir, 83.9% cited surgery as the treatment option, while only 6.8% mentioned medications [7]. In western Saudi Arabia, 75.9% reported cataract as treatable [13]. In Bisha, 69.6% believed surgery was the treatment, with 9% mentioning medications [9]. In Jeddah, 61.5% recognised surgery as a treatment option [17]. International studies also support these findings: in Iraq, 87.3% reported cataract as curable [18]; in Iran, 77.2% stated it was treatable, in Germany, 62.6% identified surgery as the best treatment [26]. Overall, the discussion highlights that awareness and knowledge of cataract in Arar City are comparatively high, particularly regarding definition, symptoms, and surgical treatment. However, gaps remain in understanding hereditary, congenital, and environmental risk factors, which should be targeted in future health education campaigns.

Limitation(s)

The descriptive nature of the study prevented it from establishing a cause-and-effect relationship, the convenience sampling method, the educational level selection bias limited the generalisability of the findings, and the self-administered questionnaire was prone to recall bias. Furthermore, using dichotomous (Yes/No/I Do Not Know) answers for knowledge and awareness may have reduced the accuracy of responses as compared to multi-point Likert Scales.

CONCLUSION(S)

Overall, cataract awareness was high. Male participants were significantly more aware of cataract inheritance and the congenital basis of the disorder than female participants. The information from this research is essential because prior understanding of the disease may inspire the patient to seek medical care earlier, thereby reducing the burden of visual impairment. There is an urgent need to employ approaches to improve a deeper understanding of cataract disease to mitigate the likelihood of visual problems.

REFERENCES

- [1] Guo B, Tan Y, Nygaard S, Carrillo C, Nouansavanh KO, Souksamone K, et al. Prevalence and risk factors for cataracts in the Lao People's Democratic Republic: The Vientiane Eye Study. *Indian J Ophthalmol.* 2022;70(5):1599-605. Available from: https://doi.org/10.4103/ijo.IJO_2137_21.
- [2] Alghamdi AH, Alamri A, Alzahrani RA, AM A, Alghamdi A, Saeed Y, et al. Awareness about causes and risk factors of cataract among general population of Albaha City. *The Egyptian Journal of Hospital Medicine.* 2017;69(6):2703-10. Available from: <https://doi.org/10.12816/0042253>.
- [3] Kholmatova Y. Definition and general description of cataract. *Spanish Journal of Innovation and Integrity.* 2024;37:91-94.

- [4] Alshammari F, Shaikh S, Hussain A, Alafnan A, Almuzaini I, Alshammari B. Public awareness of common eye diseases and the role of pharmacists in raising this awareness in Saudi Arabia: A cross-sectional study. *Healthcare (Basel).* 2021;9(6):9060692. Available from: <https://doi.org/10.3390/healthcare9060692>.
- [5] Noertjojo K, Maberley D, Bassett K, Courtright P. Awareness of eye diseases and risk factors: Identifying needs for health education and promotion in Canada. *Can J Ophthalmol.* 2006;41(5):617-23. Available from: [https://doi.org/10.1016/S0008-4182\(06\)80035-9](https://doi.org/10.1016/S0008-4182(06)80035-9).
- [6] Morya RE, Alamoudi A, Ghaddaf AA, Taher NO, Almansour A, Alnahdi WA, et al. Public awareness about glaucoma, cataract, and diabetic retinopathy in Saudi Arabia: A systematic review and meta-analysis. *International Ophthalmology.* 2023;43(10):3853-90. Available from: <https://doi.org/10.1007/s10792-023-02757-4>.
- [7] Alhabaan W, Abdulrahman MA, Asiri MY, Alshabab MQ, Alshahrani MY, Alnakhli GR, et al. Assessment of knowledge regarding cataract among Saudi adult population in Assir Region, Saudi Arabia. *Cureus.* 2022;14(12):e32703. Available from: <https://doi.org/10.7759/cureus.32703>.
- [8] Ghulaysi S, Abuallut I, Alaqsam AA, Kirat OE, Hurissi E, Ayoub S, et al. Exploring awareness of cataract and associated risk factors: A cross-sectional study among the adult population in Jazan, Saudi Arabia. *Medicine.* 2024;103(25):e38335. Available from: <https://doi.org/10.1097/MD.00000000000038335>.
- [9] Alshehri MA, Alsalouli FAA, Alaklabi SMA, Alqarni NAM, Alamri MM, Alkebir AS, et al. Assessment of public awareness and knowledge of cataracts among residents of Bisha Governorate, Saudi Arabia. *International Journal of Medicine in Developing Countries.* 2025;9(6):1375. Available from: <https://doi.org/10.24911/IJMD.51-1748524492>.
- [10] Alanazi RS, Alshammari AF, Albladi FH, Alanizy A, Ali A, Shalabi N, et al. Knowledge and attitudes regarding cataracts and their associated factors among Hail Region Residents in Saudi Arabia. *Cureus.* 2024;16(5):e60444. Available from: <https://doi.org/10.7759/cureus.60444>.
- [11] Alswaina N, Alayed FM. Public awareness and knowledge of glaucoma and cataract: A cross-sectional study. *Cureus.* 2025;17(4):e81928. Available from: <https://doi.org/10.7759/cureus.81928>.
- [12] Magliyah MS, Nageeb MR, Abdulmannan DM, Badr HM, Hemeish MM, Alotaibi WT, et al. Assessment of knowledge regarding cataract among Saudi adult population in Makkah city, Saudi Arabia. *Int J Med Sci Public Health.* 2015;4(5):595-99. Available from: <https://doi.org/10.5455/ijmsph.2015.02022015121>.
- [13] Sultan I, Alsaedi MG, Ahmed FA, Alharbi KF, Alasiri NM. Knowledge and awareness of age related eye diseases in the population of the Western region of Saudi Arabia. *World Family Medicine.* 2019;17(12):35-46. Doi: 10.5742/MEWFM.2019.93711.
- [14] Alotaibi HA, AlFarraj AA, Alhabdan SM, Alshehri RA, Alamri HK, Aloriney AM. Awareness and attitudes towards cataract, glaucoma, and diabetic retinopathy among adult patients with diabetes mellitus in Saudi Arabia. *Bahrain Medical Bulletin.* 2025;47(3):2252-59.
- [15] Haddad MF, Bakkar MM, Abdo N. Public awareness of common eye diseases in Jordan. *BMC Ophthalmol.* 2017;17(1):177. Available from: <https://doi.org/10.1186/s12886-017-0575-3>.
- [16] Bakar K, Chellammal HSJ, Sheshala R, Mustafa MF. Ocular diseases: Public knowledge and awareness in Malaysia. *SEEJPH.* 2025;XXVI:3603-22. Available from: <https://doi.org/10.70135/seejph.vi.5773>.
- [17] AlOtaybi HF, Alaslani NMH, Calacattawi RWA, Althaqafi MK, Alghthamy BA, Aljohani AM, et al. Knowledge and awareness of cataract: A population-based survey in Saudi Arabia. *International Journal of Medicine in Developing Countries.* 2021;5(1):37. Available from: <https://doi.org/10.24911/IJMD.51-1603123592>.
- [18] Al-Majeed KHA, Jaffar AF, Al Bassam E, Al-Zaid HK. Awareness of age-related eye diseases among adults over 40 years in Baghdad. *Dijlah Journal of Medical Sciences.* 2026;3(1):74-84.
- [19] Katibeh M, Ziaei H, Panah E, Moein HR, Hosseini S, Kalantarion M, et al. Knowledge and awareness of age related eye diseases: A population-based survey. *J Ophthalmic Vis Res.* 2014;9(2):223-31. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/25279125>.
- [20] Ezinne NE, Pope A, Tyson M. Awareness of common ocular conditions among trinidad population: A cross-sectional pilot study. *Health Science Reports.* 2025;8(3):e70603. Available from: <https://doi.org/10.1002/hsr2.70603>.
- [21] Fikrie A, Mariam YG, Amaje E, Bekele H. Knowledge about cataract and associated factors among adults in Yirgalem town, Sidama National Regional State, southern Ethiopia, 2020: A community based cross sectional study design. *BMC ophthalmology.* 2021;21(1):79. Available from: <https://doi.org/10.1186/s12886-021-01844-3>.
- [22] Kamińska A, Pinkas J, Wrześnińska-Wal I, Ostrowski J, Jankowski M. Awareness of common eye diseases and their risk factors-A nationwide cross-sectional survey among adults in Poland. *International Journal of Environmental Research and Public Health.* 2023;20(4):3594. Available from: <https://doi.org/10.3390/ijerph20043594>.
- [23] Alimaw YA, Hussen MS, Tefera TK, Yibekal BT. Knowledge about cataract and associated factors among adults in Gondar town, northwest Ethiopia. *Plos one.* 2019;14(4):e0215809. Available from: <https://doi.org/10.1371/journal.pone.0215809>.
- [24] Marmamula S, Boopalan D, Khanna RC, Hassija N, Keeffe J. Awareness of cataract and glaucoma in two rural districts of Telangana, India. *Indian J Ophthalmol.* 2022;70(3):982-87. Available from: https://doi.org/10.4103/ijo.IJO_977_21.

- [25] Guan H, Xue J, Ding Y, Zhang Y, Du K, Yang J. Factors influencing cataract awareness and treatment attitudes among the middle-aged and older in western China's rural areas. *Frontiers in Public Health*. 2023;10:1045336. Available from: <https://doi.org/10.3389/fpubh.2022.1045336>.
- [26] Terheyden JH, Fink DJ, Mercieca K, Wintergerst MW, Holz FG, Finger RP. Knowledge about age-related eye diseases in the general population in Germany. *BMC Public Health*. 2024;24(1):409. Available from: <https://doi.org/10.1186/s12889-024-17889-0>.

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Public Health and Community Medicine, Faculty of Medicine, Al Azhar University, Assiut, Egypt; Department of Family and Community Medicine, College of Medicine, Northern Border University, Arar, Saudi Arabia.
2. Associate Professor, Department of Ophthalmology, College of Medicine, Northern Border University, Arar, Saudi Arabia.
3. Medical Student, College of Medicine, Northern Border University, Arar, Saudi Arabia.
4. Medical Student, College of Medicine, Northern Border University, Arar, Saudi Arabia.
5. Medical Student, College of Medicine, Northern Border University, Arar, Saudi Arabia.
6. Medical Student, College of Medicine, Northern Border University, Arar, Saudi Arabia.
7. Medical Student, College of Medicine, Northern Border University, Arar, Saudi Arabia.
8. Medical Student, College of Medicine, Northern Border University, Arar, Saudi Arabia.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Mohamed M Abd El-Mawgod,
Faculty of Medicine, Al Azhar University, Assiut, Egypt; College of Medicine,
Northern Border University, 91431, Arar, Saudi Arabia
E-mail: mossa20072006@yahoo.com

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- Plagiarism X-checker: Mar 07, 2026
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- iThenticate Software: Apr 18, 2026 (1%)

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