pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

Sociodemographic and Behavioral Factors Influencing Public Awareness of Common Eye Diseases

[1]Dr Tanveer Ahmed, [2]Dr Muhammad Naeem, [3]Dr Zulfiqar Uddin Syed, [4]Mohammad Younas Khan, [5]Khizer Javed, [6]Hammad Murad

[1]Assistant Professor Eye CMH Kharian Medical College Kharian Cantt
[2]Ophthalmology, Lady Reading Hospital Peshawar LRH
[3]Associate Professor of Ophthalmology, MMC General Hospital Peshawar
[4]6Associate Professor Ophthalmology, Islamic International Medical College Trust / Riphah, International Hospital, Islamabad
[5]PIMS Islamabad
[6]UHS Lahore

ABSTARCT:
In Pakistan, there is a major increased morbidity and mortality occurrence of blindness combined with poor public knowledge of eye illnesses. The goal of this review was to assess the overall population's knowledge, mentality, and habits about prevalent ocular disorders and eye care usage. Information was obtained crosssectional, with individuals drawn at randomly from five districts of Lahore. From June 2023 to june 2024, data was collected using a pre-tested question. Rasch research was used to transform the categorical scale to break–founded information, that is referred to as the "knowledge score" and runs from 4 to +4. To examine the data, evocative figures, linear regression, binary logistic reversion, too chi square examination remained used. 97.6 percent of the 2071 persons surveyed responded to the interviewer. The average age being 36.8 (12.5) years, the bulk was men (64.8%), and just 4.2 percent remained illiterate. The majority of responders (69.2 percent) were aware that blindness may be avoided, but were least knowledgeable about age-related macular degeneration (32.5 percent). Male sex (= 0.54 96 percent CI = 0.37, 0.67, p 0.002) and higher education (= 0.32 96 percent CI = 0.26, 0.38, p 0.002) were shown to be substantially linked higher level of knowledge in multivariate analysis. Eighty-three percent of our defendants had got the positive boldness toward health-looking for conduct, in addition these with adequate money on greatest instances remained 2.83 (AOR = 2.83 96 percent CI = 2.27, 3.63 p = 0.002) percent more likely than those with insufficient income. From all participants, 23.6 percent had an eye test at least once a year, and this incidence was substantially greater among younger people, females, those with a higher education, and those with a low social status (p 0.06). The general public of Pakistan had a greater consciousness around the deterrence of sightlessness also refractive fault, but a poor level of consciousness of blindness-producing eye disorders such as age-associated macular degeneration. Intensive increases in health literacy also public actions,

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

particularly among the elderly, men, and responders having lower levels of education, are considered necessary.

Keywords:
Morbidity and Mortality, Common Eye Disease, Attitude, Practices.

INTRODUCTION:

According to various estimates, 195 million people have mild to severe visual impairment, and 34.5 million remain blind, through the significant sum of women (61 percent). Though South Asian nations have a significant load of age-associated blindness, this will still lower than in Sub-Saharan Africa (5.5 percent vs. 7.1 percent), although MEVI incidence is somewhat greater in Asian nations (24.7 percent) than in Oceania (19.7 percent) [1]. Unrestrained deflective faults (45%) are leading cause of vision impairment, followed by cataracts (34%), diabetic retinopathy, glaucoma, as well as age-related macular degeneration. Likewise, Indian research found that about 34 out of 45 people with blindness had cataracts, 12 out of 46 had diabetic retinopathy, also much extra than five out of 46 had glaucoma [2]. Furthermore, previous research from Iran revealed that just 23% of diabetic patients had undergone eye examinations, while three out of every seven non-diabetic persons through eye problems had the past of adequate eye checks. According to a largescale inhabitant's study conducted in Pakistan in 2009, the prevalence of blindness was 3.8 percent, with the greatest rates in Sindh besides KPK and the worst in rural regions, and the least in KPK [3]. Furthermore, another study published in 2012 said that cataract (52.6 percent) is leading source of blindness in Pakistan, shadowed through corneal opacity (12.9 percent), also glaucoma (8.2 percent). Even within affluent nations, there is a low level of public knowledge of primary causes of blindness. Nevertheless, since numerous research has demonstrated the role of blood pressure and glycemic management in expansion besides development of diabetic retinopathy, public health assistances to lower burden of eye diseases and, eventually, boundary preventable reasons of blindness. Based on previous data from information, attitude, also practice researches, that is clear that population has a great need for understanding about lifestyle factors, control, protection, diagnostic, and treatment. The necessity of hour is to reduce illness weight through effective application and strengthening of public health programmes, with a particular focus on VI lifestyle factors [4]. In Pakistan, very few studies have been conducted to assess the KAP of blindness. But for one research by Memon evaluating KAP concerning diabetes also diabetic retinopathy in Karachi, that assessed data of 273 sample defendants' diabetes in addition DR, and only centered on DR whilst other illnesses remained not topics of interview process, the wider populace remains not once interviewed about just KAP of eye disease. As a result, in order to develop interventional and preventative programmes, KAP of the general public must remain quantified. This will allow us to estimate cognizance openings in the overall population that need to be addressed. As a result, in the research, we describe KAP in addition related parameters in rapports of demography in the Punjab region of Pakistan [5].

METHODOLOGY:

Pakistan is split into four regions, each of which is further subdivided into divisions, districts, also tehsils. Towns and villages or villages have the lowest socio-economic status. Punjab occupies over one-fourth (27%) of Pakistan's total land area, is split into 10 divisions and 34 districts, and is home to 62 percent of Pakistan's people. These 33 districts have been chosen at random. Each district's headquarters city and rural

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

village were chosen at random. People above the age of 19, regardless of religion, sect, gender, or socioeconomic background, who had been willing to participate in activities, were questioned. The review remained showed out through door-to-door visits, in addition survey method interviewed consenting individuals. Buildings being chosen at random in cities, and likewise in villages. Depending on the lottery technique, just one person was chosen from each residence. At the same time, the ethics committee of Mayo Hospital, Lahore accepted it. Written informed consent was obtained from literate individuals those remained talented to read and sign consent form. In other circumstances, survey method employed agreement procedure afterward obtaining consent from illiterate individuals who could not comprehend the consent form. Respondents were made fully informed of their right to withdraw from the research at any time. A detailed questionnaire remained used to gather data on social economic in addition to assess KAP in overall populace. The knowledge remained measured through merely asking members if they had heard of the specific eye illness, the behavior remained measured by asking defendants about their attitudes toward seeking eye remedy if they had an eye condition, also the practice remained measured by assessing regularity of eye checks. Those substances for determining KAP of eye illness remained adapted from those utilized in Sri Lanka and Bhutan.

RESULTS:

The research received responses from 2021 of the 2080 participants addressed (efficient handling 97.5 percent), and average age SD remained 37.93 and 12.5. Males made up 65.9% of the 2021. The rural population was somewhat larger than the urban population (52.6 percent vs. 49.6 percent), 4.2 percent remained illiterate, and 37.8 percent had higher education levels than intermediate. More than majority of the people (56.7%) had balanced assets, whereas 13.1% had inadequate income mostly. Positive reactions to questionnaires ranged significantly, with the least 32.5 percent, i.e., "have you ever read of age-related macular degeneration," to the uppermost 69.2 percent. 63.1 percent of any and all responders had heard of red eye, 58.7 percent had heard of cataract, 57 percent had heard of trachoma, and 52.8 percent had gotten of DR. Trachoma, pterygium, also glaucoma awareness remained lacking, with just 42.1 percent, 39.5 percent, and 44.2 percent having heard among those disorders, correspondingly (Figure 1). Sex, different ages, and education all have had major differences with most of the other eye illness matters, whereas only age had an unimportant connotation through DR consciousness, e.g., 48.6 percent of populace in age set 32–46 remained conscious of DR, that is the identical as population age 48–63. (56.4 percent). The mean (96 percent confidence interval) of the education level was 0.162 (0.0818, 0.0497), with 49.7 percent (985/2020) having a knowledge score in optimal range, i.e., long value 0. Afterwards adjusting for covariates in the multiple regression model, males had significantly higher scores than females (96 percent CI) 0.54 (0.38, 0.67), p 0.002), and each academic ability was similarly related with an increase in "knowledge score" when associated to not any education, 0.32 (0.26, 0.38), p 0.002. Likewise, people living in cities had a substantially higher "knowledge score" than those living in rural regions, 0.22 (0.08, 0.36), p = 0.002.

Table 1:

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

Variables		Sum	%
Age 34.93 _ 12.5			
	18–30	242	29.5
	31–45	597	2.3
	46–60	47	56.2
	More than 60	1134	12.0
Sex			
	Man	710	35.2
	Woman	1309	64.8
Residence			
	Rural	1039	51.5
	Urban	980	48.5
Occupation			
	Housewife	221	11.9
	Student	187	10.1
	Businessman	223	10.6
	Teacher	280	14.8

Table 2:

	Rural	Urban	Inadequate for few time	Inadequate Resources	Adequate resources

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

Glaucoma	449 (43.2) *	422 (43.1)	184 (39.8)	112 (50.4)	114 (53.5)
Red eye	697 (67.1)	534 (54.5)	205 (44.4)	117 (52.7)	137 (64.3)
Cataract	561 (54)	583 (59.5)	274 (59.3) *	116 (52.2) *	123 (57.7) *
Trachoma	396 (38.1) *	410 (41.8)	159 (34.4)	103 (61.0)	100 (54.0)
Pterygium	382 (36.8) *	391 (39.9) *	161 (34.8)	89 (41.8)	121 (54.5)

DISCUSSION:

Our research is unique in the world to assess the KAP of prevalent eye disorders in general populace of Pakistan. The main finding of the current research was that there was a lack of information regarding prevalent eye problems among some of the Pakistani community [6] More over two-thirds of the population (69.6 percent) were uninformed of ARMD, and deficiency was more prevalent among the elderly, rural communities, and illiterate persons. The study's findings are twofold [7]. To begin, this study found negligible adequacy in understanding and information of common eye problems among some of overall community, that is far extra pronounced in populations through rural localities, poor socioeconomic status, also low educational status. Second, people in community through poor education, low socioeconomic status, and a rural location remained less probable to receive frequent eye exams. Research shows that increasing health literacy will eventually enhance health-seeking behavior in the context of eye diseases. Tertiary health care institutions in Bangladesh, like those in other poor nations such as Sri Lanka, provide competent ophthalmology treatments [8]. It would be beyond the scope of this work to illustrate the risk of diverse eye disorders in the current people, but information suggests that swelling information also understanding correlated with an increase in regular eye assessments, that certainly reduced ocular illnesses and the financial impact associated with ocular disruptions. The findings of our investigation differed from those of a study conducted in Sri Lanka [9]. In our study, the least consciousness has been seen for ARMD (32.5 percent) and the highest knowledge was shown for the reality that blindness can be precluded (69.2 percent), however in the study, the lowest awareness had been seen for DR (6 percent) and the highest for cataracts (90 percent), even though sufficient consciousness was low in both research and is affiliated with education level. Likewise, SES and educational status showed linked to greater in diabetes knowledge in Sri Lanka. Low ocular illness information was seen in both emerging and advanced nations among populations with low levels of education and socioeconomic status [10].

CONCLUSION:

This research illustrates the general public's lack of information about the most frequent eye illnesses in Pakistan. Protective eye illnesses such as ARMD and glaucoma are poorly understood. Likewise, the mentality toward eye exams is negative, and the greater the level of education, the higher the rate of eye exams. As a result, there is a need to spread awareness of the benefits of regular eye exams all throughout community. Moreover, our research shows that extensive increases in health literacy and public initiatives are required, particularly among older persons, men, and individuals with lower levels of education.

REFERENCES:

pharmacology journal volume-13-issue-1
Journal link: https://pharmacologyjournal.org/
Submission 15 November 2024
Acceptance Dec February 2024
Publication 16 January 2025

1. WHO. WHO Director-General's remarks at the media briefing on 2019-nCoV on 11 February 2020. https://www.who.int/dg/speeches/detail/who-director-general-s-remarks-at-themediabriefingon2019-ncov-on-11-february-2020. Accessed 6 Nov 2021.
2. WHO. Rapid assessment of service delivery for NCDs during the COVID-19 pandemic. https://www.who.int/publications/m/item/rapid-assessment-of-service-delivery-forncdsduringthecovid-19-pandemic. Accessed 16 Jun 2020.
3. Ministry of Health, Singapore. Circuit breaker to minimise further spread of COVID19. https://www.moh.gov.sg/news-highlights/details/circuit-breaker-to-minimisefurtherspreadofcovid-19. Accessed 6 Nov 2021.
4. Lim LW, Yip LW, Tay HW, et al. Sustainable practice of ophthalmology during COVID-19: challenges and solutions. Graefes Arch Clin Exp Ophthalmol. 2020;258(7):1427– 36. https://doi.org/10.1007/s00417-020-04682-z.
5. Nair AG, Gandhi RA, Natarajan S. Effect of COVID-19 related lockdown on ophthalmic practice and patient care in India: results of a survey. Indian J Ophthalmol. 2020;68(5):725– 30. https://doi.org/10.4103/ijo.IJO_797_20.
6. Schirmer CM, Ringer AJ, Arthur AS, et al. Delayed presentation of acute ischemic strokes during the COVID-19 crisis. J Neurointerv Surg. 2020;12(7):639– 42. https://doi.org/10.1136/neurintsurg2020-016299.
7. Tam C-CF, Cheung K-S, Lam S, et al. Impact of coronavirus disease 209 (COVID-19) outbreak on ST-segment-elevation myocardial infarction care in Hong Kong China. Circ Cardiovasc Qual Outcomes. 2020;13(4):e006631. https://doi.org/10.1161/CIRCOUTCOMES.120.006631.
8. Lai THT, Tang EWH, Chau SKY, Fung KSC, Li KKW. Stepping up infection control measures in ophthalmology during the novel coronavirus outbreak: an experience from Hong Kong. Graefes Arch Clin Exp Ophthalmol. 2020;258(5):1049–55. https://doi.org/10.1007/s00417-02004641-8.
9. Nair AG, Narayanan N, Ali MJ. A survey on the impact of COVID-19 on lacrimal surgery: the Asia–Pacific perspective. Clin Ophthalmol. 2020;14:3789–99. https://doi.org/10.2147/OPTH.S279728.
10. Dore B. COVID-19: collateral damage of lockdown in India. BMJ. 2020. https://doi.org/10.1136/bmj.m1711.