

Assessment of Awareness Level towards the Risk of Chronic Use of Steroids Causing Cataract in Aseer Region, Saudi Arabia

Abdulrahman Alamri, MD* Shahd Abdulhakeem Al Hamdan, MBBS** Razan Saeed Al-Maalwi, MBBS** Reem Thalib Hadhiri Alalyani, MBBS** Adhwaa Ahmed M Aljari, MBBS** Mohammed Abdullah Aoun Alshahrani, MBBS** Jood Abdulhakeem Al Hamdan, MBBS** Atheer Saud Alshahrani, MBBS** Fahad Mohammed A Alqahtani, MBBS** Amjd Sowaid M Algarni, MBBS**

ABSTRACT

Study Design: Cross-sectional

Background: Millions of individuals worldwide had vision impairment, and 32 million people were blind. As a result of cataracts, 10.8 million and 35.1 million individuals were respectively blind and visually impaired. In 2010, cataracts were responsible for 18.4% of all cases of moderate to severe vision impairment and 33.4% of all blindness globally.

Methods: In this cross-sectional study, data were collected by the purposely constructed questionnaire. A questionnaire composed of the demographic items and items related to the awareness and knowledge about the risk of chronic use of steroids causing cataract.

Results: 60% were male while 40% were females, mean SD of age was 29.5(12.5) 92% were from Asir region, 17.6% have university level or higher education.

Conclusion: Adult Saudis in the Assir city are well-informed about cataracts. Future research should concentrate on raising knowledge of cataracts.

Keywords: Cataract, Eye, Diseases, Steroid

INTRODUCTION

Any clouding or opacity of the eye's lens that increases light dispersion is referred to as a cataract. The separation of proteins, the aggregation of proteins, or the disturbance of the normal alignment or packing of the fiber cells can all lead to lens opacity.¹

In 2010, 191 million individuals worldwide had vision impairment, and 32 million people were blind. As a result of cataracts, 10.8 million and 35.1 million individuals were respectively blind and visually impaired. In 2010, cataracts were responsible for 18.4% of all cases of moderate to severe vision impairment and 33.4% of all blindness globally. These rates were higher (>40%) in South and Southeast Asia and Oceania and lower (15%) in high-income cities. Even though it is a disease that can be prevented and treated, a cataract is the main cause of blindness and vision impairment in developing nations.^{2,3}

Every treatment for progressive glaucomatous optic neuropathy carries a certain level of risk and expense, as well as the possibility for side effects. The first line of therapy for glaucoma is typically the use of a topical selective or nonselective β -blocker or a topical prostaglandin analog; topical α -agonists and topical carbonic anhydrase inhibitors are the second line of treatment. Additional techniques for lowering intraocular pressure in patients who do not react to glaucoma medications include laser trabeculoplasty and incision surgery. The World Health Organization estimates that the prevalence of vision impairment in Saudi Arabia to be 23.5% and the prevalence of

blindness to be 1.7%, respectively. Refractive error and cataract were the two main causes of reduced vision.^{4,5}

Refractive error prevention, chronic disease detection, and health education campaigns to increase awareness of cataracts should be the main goals of eye care initiatives. In order to gauge their level of knowledge regarding the causes and risk factors for cataracts, we did a survey among the general population in the Asir city. Our specific goals have been to measure factors related to the care, prevention, and management of cataracts among people living in the Assir region of Saudi Arabia, to assess the prevalence of patients who have been diagnosed with cataracts, to assess the level of knowledge about cataract causes and risk factors, and to assess the knowledge of factors related to cataract care, prevention, and management.⁶⁻⁸

METHODS

In this cross-sectional study, data were collected by the purposely constructed questionnaire. A questionnaire composed of the demographic items and items related to the awareness and knowledge about the risk of chronic use of steroids causing cataract. A questionnaire was constructed after the series of discussions between the panel of experts this panel was composed of a subject specialist, researcher, and language expert. Cronbach alpha of the questionnaire was calculated. The study was conducted in the Aseer region of Saudi Arabia. The study duration was from January-2021 to April-2021.

* Professor in Ophthalmology
Department College of Medicine
King Khalid University
University in Abha, Saudi Arabia.
E-mail: amaamri@gmail.com

** Student
King Khalid University
University in Abha, Saudi Arabia.

After collection of data, data were coded and entered in the SPSS ver.20 software for analyses descriptive statistics (mean standard deviation, frequencies, and %s were computed), to measure the significance differences chi-square test was used at 5% level of significance. Data was collected from the patients who visit the Primary health care centers. Ethical approval was obtained from King Khalid University, Saudi Arabia.

RESULTS

Total respondent was 500, Cronbach alpha of the study was 0.84.

Table 1: Demographics

	Variables	Freq.	%
Gender	Male	300	60.0%
	Female	200	40.0%
Age	Less than 18	150	30.0%
	18-30	140	28.0%
	31-40	100	20.0%
	41-50	69	13.8%
	more than 50	41	8.2%
	Residency	Asser region	460
	Other Region	40	8.0%
Level of education	Primary school	145	29.0%
	Middle school	78	15.6%
	Secondary school	189	37.8%
	University and higher	88	17.6%

As per table 1, 60% were male while 40% were females, mean SD of age was 29.5(12.5) 92% were from Asir region, 17.6% have university level or higher education.

Table 2: Awareness

Variables	Yes		No	
	N	Freq.	N	Freq.
Have you ever heard about cataract?	376	75.20%	124	24.80%
Do you suffer from cataract now or in the past ?	129	25.80%	371	74.20%

The prevalence of awareness regarding cataract was 75.2%, 25.8% have patient history of cataract.

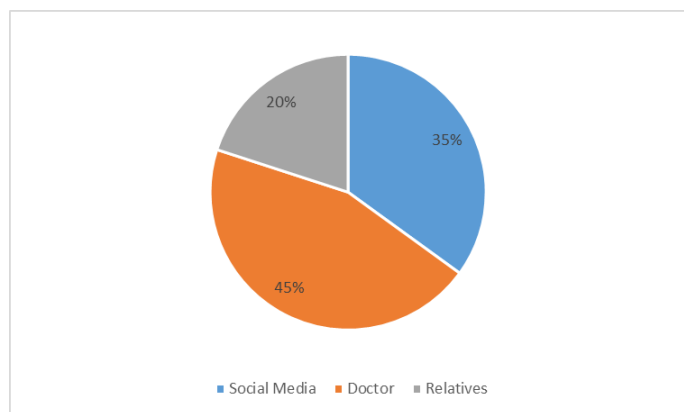


Figure 1: Source of Information

Doctors (45%) were the major source of information.

Table 3: Usage of steroid therapy

	Yes	No
Do you use steroid therapy for long periods?	70	59
Do you use steroid therapy for long periods?	50	79
What is the type of steroid therapy?	Tropical	15
	Intravenous	25
	Oral	8
	Inhaled	22

70 respondents used steroid therapy, out of 70 25 used intravenous type of therapy.

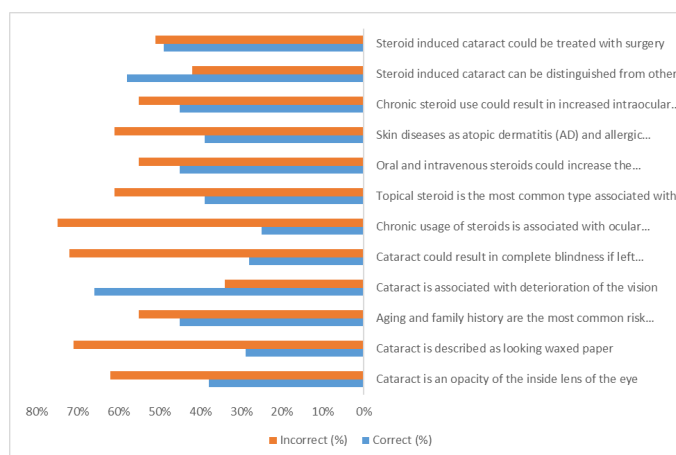


Figure 2: Knowledge and Awareness

Majority opted correct answered in response of the question steroid induced cataract could be treated with surgery.

Table 4: Gender wise comparisons of Awareness

	Gender wise comparisons of Awareness		
	Yes	No	p-value
Male	206	94	N.S
Female	170	30	

We did not observe significant gender differences while we compared awareness with gender.

DISCUSSION

More than 50% of study participants had solid knowledge of cataracts, according to this report. This result was less favorable than those obtained from research conducted in China (70.9%), Nepal (70.4%), Iran (74%), Gondar town, North West Ethiopia (61.7%), and Yirgalem town, Southern Ethiopia (64.7%).^{1,7} However, the results were better than those of investigations carried out in Southern India (18%)¹² and Nigeria (18.2%)¹⁰. Cut-off points used to calculate the knowledge composite score, differences in the target group, and study conditions can all be used to explain these variations.⁷⁻¹¹

Less than 40% fewer study participants who did not have a self-history of cataract were likely to have excellent knowledge than those who did. This may be because someone with a history of cataracts may visit an eye center to get information. Additionally, the person might undergo the penalties and treatment choices that could encourage optimism in them.¹²

It is well known that using systemic corticosteroids increases the chance of cataract.¹ The bulk of asthmatics should use inhaled corticosteroids, according to current recommendations. Nearly 10% of adults over 65 in the United Kingdom have been diagnosed with asthma or chronic obstructive lung disease (COPD), and the majority of these patients will eventually be given an inhaled corticosteroid prescription.⁴ Inhalable corticosteroids are currently used by more than 5% of UK citizens; only antibiotics, analgesics, bronchodilators, and diuretics are more frequently recommended. It's possible to anticipate negative consequences from systemic glucocorticoids.¹³

CONCLUSION

Adult Saudis in the Assir city are well-informed about cataracts. Future research should concentrate on raising knowledge of cataracts. Patients should be informed about risk factors, complications, available treatments for cataract disease, risks associated with operation, and the necessity of routine follow-up exams. Regular eye exams will therefore be better known for the early diagnosis and management of these conditions.

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Competing Interest: None

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