

Knowledge, attitude and perception regarding spectacle use among patients attending eye OPD in a tertiary care hospital

Avleen Kaur^{1*}, Summaiya Irshad²

¹Post graduate GMC Jammu, Jammu and Kashmir, India

²Post graduate GMC Jammu, Jammu and Kashmir, India

Received: 19-04-2024 / Revised: 11-05-2024 / Accepted: 04-06-2024

Abstract

Background: Uncorrected refractive error is a major cause of avoidable vision impairment which significantly affects every aspect of a human's life and is a treatable cause of visual impairment that can be easily corrected by the use of spectacles which remains a time-tested to correct refractive errors. **Method:** This hospital-based observational study was conducted in the OPD of the Department of Ophthalmology, Government Medical College, Jammu over a period of three months from January 2022 to March 2022. A total of 212 patients were asked questions regarding knowledge, attitude, and perception regarding spectacle use. Data was interpreted in both descriptive and inferential statistics i.e., frequency and percentage distribution using SPSS, version 20.0. **Results:** It was observed that the majority of patients were in the age group of 28-37 years (32.54%) and the male: female ratio was 1.14:1. Most (56.41%) of the patients had inadequate knowledge regarding the use of spectacles. There was a mixed perception and a favorable attitude noted among study participants. The most common problem faced was the fogging of glasses (70.2%). **Conclusions:** It was concluded that some of these issues are minor and can be corrected using better quality lenses available nowadays. Lenses can be chosen according to the needs. However, there is an issue of financial expense due to frames and glasses. Education and propagation of information about refractive errors and spectacle use in schools and colleges by various stakeholders would help in clearing the fallacies and any misconceptions regarding the use of spectacle use. A concerted effort from eye care professionals, mass media, and ministries of health and education in India, should thus be the way forward.

Keywords: Refractive error, Spectacles, Knowledge, Perception, and Attitude.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

Uncorrected refractive errors are the most common cause of visual impairment globally. According to the World Health Organization, it is estimated that 153 million people in the world live with visual impairment due to uncorrected refractive errors. Patients with refractive errors commonly present with blurring of vision. The exact cause remains idiopathic but hereditary conditions, poor nutrition and environmental factors are amongst the most common risk factors responsible for majority of the refractive errors.¹

Uncorrected refractive error is a major cause of avoidable vision impairment which can significantly affect human life in every aspect including social life, education, and economic status. It can be easily treated by using spectacles, but because of poor awareness, attitude, low priority for eye care, poor access, not being able to afford spectacles, and some misconceptions regarding the use of spectacles, there is less use of spectacles by the patient.²

The spectacles are frame-bearing lenses that are worn in front of the eyes to enhance vision. The use of spectacles remains the time-tested method to correct refractive errors, despite the availability of other options including the use of contact lenses and refractive surgeries.³

Thus, the present study was undertaken to assess the knowledge, attitude, and perception regarding spectacle use among patients attending OPD of the Department of Ophthalmology, Government Medical College, Jammu.

Aims and objectives

The aim and objectives were to determine the knowledge, attitude, and perception regarding spectacle use among spectacle wearers and to evaluate the problems faced by spectacle wearers.

*Correspondence

Dr. Avleen Kaur

Post graduate GMC Jammu, Jammu and Kashmir, India.

E-mail: xxxx

Material and methods

This hospital-based observational study was conducted in the OPD of the Department of Ophthalmology, government medical college, Jammu over a period of three months from January 2022 to March 2022. A total of 212 patients were involved in the study after obtaining informed consent.

Inclusion criteria

The study included patients with age >18 years and using spectacles ≥ 6 months.

Exclusion criteria

Patients with other ocular and systemic diseases were excluded. A detailed history and examination were done of the study participants which comprised of visual acuity measurement using Snellen's visual acuity chart, slit lamp evaluation of the anterior segment, and non-contact tonometry for recording the intra-ocular pressure (IOP). The study participants were also interviewed using a structured questionnaire which gathered information regarding demographics, eye care-seeking behavior, knowledge of refractive errors, and their correction, perception, and attitude towards the use of spectacles. Data was recorded in a Microsoft Excel sheet and analyzed by using the SPSS 20.0 version. Data was interpreted in both descriptive and inferential statistics i.e., frequency and percentage distribution.

Results

The present study evaluated a total of 212 patients to assess knowledge, attitude, and perception regarding the use of spectacles.

Table 1: Age distribution of patients, (n=212)

Age range (years)	N	Percentage (%)
18-27	33	15.56
28-37	69	32.54
38-47	48	22.64
48-57	29	13.67
58-67	23	10.84
>68	10	4.71

In the present study, the majority of patients (32.54%) were in the age group of 28 to 37 years.

The male-to-female ratio was 1.14:1 with 53.3% of the patients being male (Figure 1)

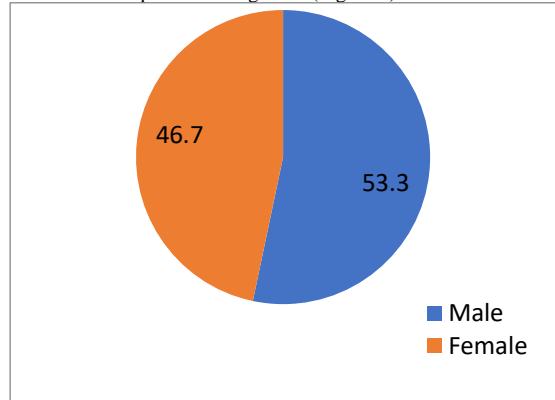


Figure 1: Gender distribution of patients

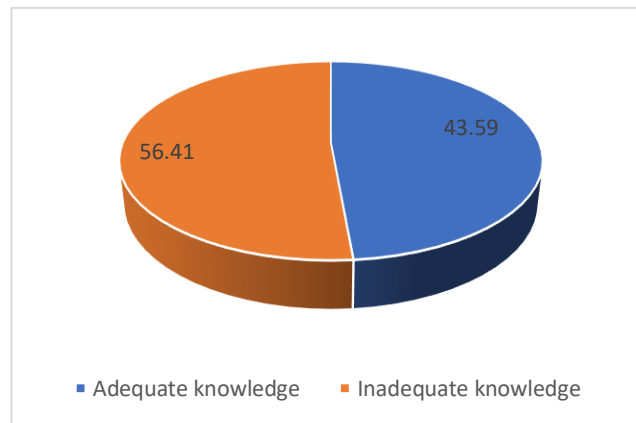


Figure 2: Knowledge of spectacles among patients

It was observed that most (56.41%) of the study subjects had inadequate knowledge regarding the use of spectacles.

Table 2: Attitude of patients regarding the use of spectacles

Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Spectacles should be used if prescribed by an ophthalmologist	62	46	32	39	33
Any age group can use spectacles	61	46	15	45	45
Male & female both should use spectacles	103	59	22	21	7
Spectacle corrects refractive errors	69	72	53	26	12
Spectacles weaken the eyes	56	43	37	45	31
Spectacles can cause eye problems	23	41	30	44	74
Spectacle is a cosmetic blemish	57	52	21	43	39
Spectacle reduces self-esteem and lowers confidence	51	40	42	45	34

Table 3: Perception of patients regarding use of spectacles

Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Using spectacles affects opportunity for education	69	51	17	46	29
Using spectacles affects opportunity for job	61	53	28	32	38
Using spectacles affects opportunity for marriage	45	42	37	51	37

Use of spectacle is a matter of embarrassment	52	56	19	43	42
Use of spectacles is a sign of intelligence	45	28	14	69	56
Use of spectacles is a sign of wealth	40	35	26	70	41
It prevents vision loss	62	57	28	44	21
It relieves discomfort & headache	65	46	14	43	44
It is the cheapest and safe methods to correct refractive errors	68	66	22	30	26

Table 4: Problems faced by spectacle wearers among patients

Problems	Number	Percentage
Costly	129	61
Scratch/broken lenses	143	67.6
A feeling of dependency on glasses	126	59.33
Fogging of glasses	149	70.2
Improper fitting	119	56
Uncomfortable	71	33.5

It was observed that the majority of the study participants had a favorable attitude (Table 2) and a mixed perception towards the use of spectacles (Table 3). The commonest problem was the fogging of glasses (70.2%) among study participants (Table 4).

Discussion

Our study found maximum patients were in the age group of 28-37 years of age with male preponderance similar to a previous study.⁴ Most (56.41%) of the patients had inadequate knowledge with a favorable attitude and mixed perception regarding the use of spectacles in accordance with a study conducted by Desalegn et al.⁴ The commonest problem was the fogging of the glasses among our study participants. In a similar study conducted by Ayanniyi AA et al cost of spectacles was found to be the most common problem among spectacle wearers.⁵

This study has limitations as it was conducted on a small sample size of subjects presenting to eye OPD. We need more such studies on a larger scale with varied populations to assess knowledge, attitude, and perception regarding spectacle use in a better manner.

Conclusion

Our study showed inadequate knowledge favorable attitudes and mixed perceptions regarding the use of spectacles. Some of these issues are minor and can be corrected using better quality lenses available nowadays which can be chosen according to the needs. However, there is an issue of financial expense due to frames and glasses. Education and propagation of information about refractive errors and spectacle use in schools and colleges by various stakeholders would help in clearing the fallacies and any misconceptions regarding the use of spectacle use. A concerted effort from eye care professionals, mass media, and ministries of health and education in India, should thus be the way forward.

References

1. Khan NE, Mahomedy M, Mngadi L, Moola Z, Moosa Z, Ndwandwe G, et al. Knowledge, attitudes, and practices towards refractive error amongst students. *AVEH*. 2022;81(1).
2. Alrasheed SH, Naidoo KS, Clarke-Farr PC. Attitudes and perceptions of Sudanese high-school students and their parents towards spectacle wear. *Afr Vision EyeHealth*. 2018;77(1), a392.
3. Al-Jadedasector B. Attitudes and Beliefs of Students to spectacles wear for the correction of refractive errors in Dijlah University College. *DJSE*. 2021;2(2):14-21.
4. Desalegn A, Tsegaw A, Shiferaw D, Woretaw H. Knowledge, attitude, practice and associated factors towards spectacles use among adults in Gondar town, northwest Ethiopia. *BMC Ophthalmol*. 2016 Oct 21;16(1):184.
5. Ayanniyi AA, Adepoju FG, Ayanniyi RO, Morgan RE. Challenges, attitudes and practices of the spectacle wearers in a resource-limited economy. *Middle East Afr J Ophthalmol*. 2010;17(1):83-7.

Conflict of Interest: Nil

Source of support: Nil