# Awareness of Contact Lens Wear in the Students of the University of Lahore

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#### **ABSTRACT**

## **PURPOSE**

The main purpose of this study is to review the awareness of contact lens wear in the students of The university of Lahore, Lahore.

#### STUDY DESIGN

Descriptive cross - sectional study.

## **MATERIALS AND METHODS**

Data was collected by self - designed proforma after taking consent from subjects. This was a comparative cross sectional (analytical) study which included 53 subjects using contact lenses. Patient having any other systemic disorder excluded from the study. Patients involved in the study was above 20 years to 60 years of age groups. Data was analyzed using SPSS version 20. Data was collected by self - designed proforma after taking consent from subjects.

## **RESULTS**

Results showed 30 out of 53 (56.6 %) subjects of The University of lahore use contact lens on daily basis, while 43.3 % (23 / 53) don't use daily but use on and off. 38 out of 53 (71.1 %) subjects of The University of Lahore wash hands regularly before using contact lenses 28.3 % (15 / 53) don't. 33 subjects out of 53 (62.2 %) rub or rinse their case with solution after each use, while 37.7.1 % (20 / 53) don't. 26 subjects out of 53 (49.0 %) know about contact lens use from doctors, while 50.9 % (27 / 53) knew it from their friends. About 43 out of 53 (89.8 %) subjects use soft contact lens, while 18.9 % (10 / 53) use hard contact lens. 36 out of 53 (67.9 %) subjects use contact lens for cosmetic purposes, while 32.0 % (17 / 53) don't. The 47 out of 53 (88.6 %) subjects use contact lens solution for cleaning case and contact lens, while 11.3 (6 / 53) use water.

# **CONCLUSION**

It is concluded that there is less awareness about contact lenses uses among university students. Mostly users of contact lenses have less awareness about proper parameters of contact lenses. The study p - value 0.000 shows significant results.

## **KEYWORDS**

Contact lens, University students

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## **INTRODUCTION**

Contact lens are small are small plastic lenses directly apply on the surface of cornea to correct visual defects and for cosmetic purposes. Contact lens is an inconsequential curative, aesthetic or remedial piece of equipment to positioned in a straight line on the top of the front surface of the eye which is known as cornea. Contact lenses have numerous remuneration as well as look and level headedness. Several populace prefer to have on contact lenses as conflicting to spectacles while they do not mist up, they give a large field of view, and they are also appropriate for a numeral of sport actions. According to construction material contact lens are vary in types and using period, substitution time Table, and intend. In the United States, contact lenses are precise therapeutic procedure and entail a recommendation by eye care specialist.<sup>2</sup> Contact lenses is compulsory constituent in ophthalmic concerns. Presently materials used in the formation of contact lenses includes (PMMA) polymethyl methacrylate, (CAB) cellulose acetate butyrate and siloxane which contain hydrogels, silicons and polymetha acrylates, silicones, and hydrogels. Appropriateness of a substance for medical contact lenses are used to determine by the many properties in which commonly significant are chemical, mechanical and physical characteristics particularly hydrophobicity, gas permeability and lipid absorption and lens movement.<sup>3</sup> Manufacturing technique of contact lenses depends upon base lens diameter. For choice and curve and appropriate of medical contact lenses require acquaintance and awareness about diverse types of contact lenses effect corneal composition.<sup>4,5</sup> Status of contact lens continue to boost by normal enhancement in material and variant appropriate used for a diversity of contact lenses users. The idyllic contact lenses uses to remove refractive errors has proven tricky to get with in sequence of complication with even the mainly extremely urbanized system.<sup>6,7</sup> Latest research have revealed that the utilize of contact lens for refractive error rectification to be high and more amongst the younger stratum of populace.8 Complication of contact lenses mainly regular related with utilize includes disorder which more common are conjunctivitis, corneal abrasions, dry eye, corneal edema, corneal ulcer and neo vascularization and Keratitis. <sup>9</sup> The awareness in college students related to contact lenses and complications of contact lenses was instigate lacking between the younger user and eighty seven percent of these user chosen usage of contact lenses in malice of the ocular problems associated to their utilize.9 Aesthetic recompense and handiness subsist the majority frequent reason cite for contact lens utilization. 10,11

Acquaintance as regards of utilization of outline would demonstrate the use to wide - ranging eye care PR actioner to conduct juvenile potential user in contact lens type, cleanliness and prototype of apply.<sup>12</sup>

## LITERATURE REVIEW

The recent study of contact lenses awareness and knowledge was done to find an outline, type according to the material of contact lens uses among college students by means of a spot light on the basis for contact lenses advantages and disadvantages associated to their apply. 13,14 The Study on awareness about contact lenses emphasizes the fitting and the effect of visual acuity on subjective vision and myopic contact lenses. visualization clearness (transitional and close to) were considerably poorer at evaluation compare with fitting even as applying myopic contact lenses, students wearing these lenses were satisfy, feel compfortability and vision constancy. 15 Patients wearing subjective contact lenses were eighty four percent and 36 % applying myopic contact le 16 Chemical composition of contact lenses seem to be typically in command for the sticking together of Acanthamoeba species. Acanthamoeba production was seen in polymethyl methacrylate material and hydrogel material of contact lenses.<sup>17</sup> Amoebic production adhere in each and every one type of contact lenses material and the significant value was (P > 0.05). In hydrogel and polymethyl methacrylate no noteworthy differentiation was establish on amoebic adhesion. It is concluded that in silicon material due to the presence of topology surface showed no effect on adhesion, uses and visual acuity remain same in both contact lenses users.18

It was an institutional based study conducted on 53 subjects using contact lenses both therapeutics and cosmetics in this study. This study explained the awareness of contact lens wear in the students of the University of Lahore, Lahore. Patients who don't want to get permission to perform these tests willingly were excluded in this study. Data was collected a self - designed preform. All the data was entered and analyzed using Statistical Software SPSS Version 22.00 (Tables 1-7).

	Frequency	Percentage
Daily wear	30	56.60 %
Use on and off	23	43.30 %
Table 1. Do you Wear Contact Lens on Daily		
Basis.		

This Table shows that about 30 out of 53 (56.6 %) subjects of The University of Lahore use contact lens on daily basis, while 43.3 % (23 / 53) don't use daily but use on and off.

	Frequency	Percentage
Yes	38	71.10 %
No	15	28.30 %
Table 2. Do you Wash your Hands Regularly before using CL.		

This Table shows that about 38 out of 53 (71.1 %) subjects of The University of Lahore wash hands regularly before using contact lenses 28.3 % (15/53) don't.

	Frequency	Percentage
Yes	33	62.20 %
No	20	37.70 %
Table 3. Do you Rub or Rinse your Case with Solution after each use.		

This Table shows that about 33 out of 53 (62.2 %) subjects of The University of Lahore rub or rinse their case with solution after each use, while 37.7.1 % (20 / 53) don't.

	Frequency	Percentage
Doctor	26	49.00 %
Friend	27	50.90 %
Table 4. Knowing about Contact Lens use from.		

This Table shows that about 26 out of 53 (49.0 %) subjects of the University of Lahore knew about contact lens use from doctors, while 50.9 % (27 / 53) knew it from their friends.

	Frequency	Percentage	
SOFT CL	43	81.10 %	
HARD CL	10	18.90 %	
Table 5. Type of Contact Lens.			

This Table shows that about 43 out of 53 (89.8 %) subjects of the University of Lahore use soft contact lens, while 18.9% (10 / 53) use hard contact lens.

	Frequency	Percentage	
Cosmetic	36	67.90 %	
Refractive	17	32.00 %	
Table 6. The Purpose of Wearing CL.			

This Table shows that about 36 out of 53 (67.9 %) subjects of The University of Lahore use contact lens for cosmetic purposes, while 32.0 % (17 / 53) don't.

	Frequency	Percentage
CL Solution	47	88.10 %
Water	6	11.30 %
Table 7. What do use for Cleaning of your Case		

This Table shows that about 47 out of 53 (88.6 %) subjects of The University of Lahore use contact lens solution for cleaning case and contact lens, while 11.3 % (6 / 53) use water.

# **DISCUSSION**

Another study whose results are similar to my study that the expediency, soothe and visual reasons were cite as the major motive for contact lenses user use and keratoconus was mentioned as a reason by 1.5 % of the contact lenses users. 19 All rigid gas permeable lenses user in the research showed that they have thinning of cornea. These conclusion are reliable with other studies done on awareness of knowledge about contact lens using in university students.<sup>20</sup> The assessment pervasiveness and wide - ranging acquaintance of CLS show off amongst female contact lens wearer and to scrutinize to put into practice of contact lenses dispensation by non - reliable ophthalmic provisions.<sup>21</sup> About 1466 university students in which all females are included and one thousand seven hundred sixty six cosmetics stores registered from regional area were arbitrarily interview by means of self - designed Performa. The guestion address wide - ranging concern / management of contact lenses, contact lens container and elucidation cleanliness practice by contact lens users, the contact lens selection accessible in the cosmetics stores.<sup>22</sup> The prevalence of contact lens was (1029 / 1466) i.e. seventy two percent. Half of contact lens users were i.e. 50 % were part time user of contact lens and (63.3 %) aesthetic reason

were the main basis for contact lens users. Approximately 40 %of contact lens users use contact lenses devoid of recommendation with any eye specialist. According to survey about awareness of contact lenses mostly users purchasing location was spectacle dispensing stores (51 %), beauty salon (38 %), and remaining from pharmacies (11 %). In relation to CLS concern, ninety percent of the uses sufficiently wash their hands previous to management of contact lens and about 72.8 % altered their solutions every day, while 8 % admitted to intermittent all night use of their contact lenses and 27.2 % now and then communal their contact lenses with acquaintance.

## **CONCLUSION**

It is concluded that there is less awareness about contact lenses uses among university students. Mostly users of contact lenses have less awareness about proper parameters of contact lenses. The study p - value 0.000 shows significant results.

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