

## Knowledge and Practice Regarding Contact Lens Wear and Care Among Undergraduate Students in Universiti Sains Malaysia

Nurul Akmal Asnil Khairi, Norhasmah Mohd Zain

Nursing Programme, School of Health Sciences, Universiti Sains Malaysia, Malaysia

\*Corresponding author: [hasmahmz@usm.my](mailto:hasmahmz@usm.my)

Received: 25<sup>th</sup> July 2022

Accepted: 23<sup>rd</sup> August 2022

Published: 30<sup>th</sup> October 2022

### Abstract

Contact lenses are thin optical correction lenses worn on the eye and rest on the cornea's surface. The number of individuals who wear contact lenses is growing every day, but many people are unaware of the benefits and drawbacks of wearing them. Contact lens wear and care that is not adhered to can lead to severe ocular complications and permanent vision loss <sup>[1]</sup>. Overall rates of non-compliance with good contact lens wear have been cited in the literature as ranging from 40-91% in the past <sup>[2]</sup>. Knowledge and practice regarding contact lens wear and care is very important to control its progression and its complication effectively.

The objective of this cross-sectional study is to determine the knowledge and practice regarding contact lens wear and care and factor associated with the practice among undergraduate students in Universiti Sains Malaysia who have experienced wear contact lens. The questionnaire adopted from Abd Aziz et al <sup>[3]</sup> was distributed using the online method of Google form between January to May 2022. Data were analyzed using SPSS 26. Descriptive statistics were performed to determine the knowledge and practice. General linear regression modelling was used to analyze factors associated with practice.

A total of 170 undergraduate students from various faculties on 3 campuses of USM aged 20-27 years old were involved in this study. Regularity of contact lens use showed most respondents used contact lens as occasionally (38.8%) and for 4-6 days per weeks (25.3%). Half of respondent mentioned their purpose of contact lens use as a refractive error (51.2%) and there is similar percentage in term of duration of contact lens use for less than 1 year and 5 years (30% and 30.6% respectively). Mean score of knowledge was  $21.71 \pm 2.46$  with 51.8% of the respondents in this study have poor knowledge of contact lens wear and care. Mean score of practice was  $22.49 \pm 2.76$  with majority of the respondent (74.1%) have poor practice regarding contact lens wear and care. In the final model of general linear regression, factors associated with the practice of contact lens wear and care were gender, course of study, purpose of using contact lens, duration of contact lens use and knowledge of contact lens wear and care ( $p < 0.05$ ).

Table 1. Factors associated with practice regarding contact lens wear and care

Variables	SLR b (95% CI)	MLR Adj b (95% CI)	P value
Constant		27.719 (24.336, 31.103)	<0.001
Knowledge score	-0.307 (-0.506, -0.182)	-0.173 (-0.351, -0.036)	0.017
Gender = male, female(0)	-0.170 (-1.994, -0.123)	0.183 (0.288, 1.990)	0.009
Course of study = arts, science (0)	-0.227 (-4.206, -0.842)	0.160 (0.245, 3.188)	0.023
Purpose of use = others, refractice error (0)	-0.358 (-2.749, -1.184)	-0.253 (-2.165, -0.619)	<0.001
Duration of use = ≤5 years, >5 years (0)	-0.300 (-2.657, -0.923)	-0.186 (-1.949, -0.273)	0.010

This study indicate there is a need for health education and awareness program to contact lens wearers especially among young people regarding contact lens usage, care, and its related complications.

### Keywords

Eye care, Knowledge, Practice, Factors

### References

1. Loffredo L, Pacella F, Pacella E, Tiscione G, Oliva A, Violi F. Conjunctivitis and COVID-19: A meta-analysis. *Journal of Medical Virology*. 2020; 92(9): 1413–1414. <https://doi.org/10.1002/JMV.25938>
2. Robertson DM, Cavanagh HD. Non-compliance with contact lens wear and care practices: a comparative analysis. *Optometry and Vision Science : Official Publication of the American Academy of Optometry*. 2011; 88(12): 1402. <https://doi.org/10.1097/OPX.0B013E3182333CF9>
3. Abd Aziz NA, Abdul Ghani NA, Md Isa KA, Mustafa N. Practice and knowledge of contact lens use among medical students of Universiti Teknologi MARA. *Environment-Behaviour Proceedings Journal*. 2019; 4(11): 53. <https://doi.org/10.21834/E-BPJ.V4I11.1742>