UNIVERSITI TEKNOLOGI MARA

CONTRAST SENSITIVITY FUNCTION IN COSMETIC CONTACT LENS WEARERS FROM LICENSED AND UNLICENSED PRACTITIONER

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AUTHOR' DECLARATION

I hereby declare that the works in this project was my own except for the quotations and summaries which have been acknowledged. The project had not been accepted for any degree and was not concurrently submitted for any award of other degree.

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ABSTRACT

Purpose: Cosmetic contact lens wearer had increased over the years. The increasing numbers of unlicensed practitioner promoting and selling the cosmetic contact lenses had become a concern. This was because the contact lens was not fitted properly to the patient's eye. The materials of the contact lenses were sometimes not known and therefore were dangerous. The aim of this research was to find out if there were any differences of contrast sensitivity between the two tested groups. The two groups were those who bought the cosmetic contact lenses from unlicensed practitioner and those who bought cosmetic contact lenses from licensed practitioners.

Results: The study method used in this study was purposive sampling. The tools and instruments used were the slit lamp bio-microscopy, the CSV 1000E chart and the Snellen chart. To compare the means between the two groups, Mann-Whitney U Test was used because the data was not normal. By using the CSV 1000E chart, there were no significant differences in contrast sensitivity function in both tested groups. For each spatial frequency tested, the p values for 3 cpd was 0.918, 6 cpd = 0.382, 12 cpd = 0.318 and for 18 cpd = 0.187.

Conclusion: This study has failed to show that cosmetic contact lens bought from unlicensed practitioner caused contrast sensitivity reduction. Future study should be done with larger sample size, various cosmetic contact lens brands, colors and designs, measuring the contact lens thickness, noting the water contents of the contact lenses and taking account of the corneal edema. The implication of this study was to find out if there were any effects in contrast sensitivity if the contact lens were bought from different sources.

Keywords: Contrast sensitivity function, cosmetic contact lens, tinted contact lens, licensed practitioner, unlicensed practitioner, CSV 1000E

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