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SYMPTOMS RELATED TO COMPUTER VISION SYNDROME AND THE CHANGES OF ACCOMMODATION AFTER VDU WORK

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AUTHOR'S DECLARATION

I hereby declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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ABSTRACT

SYMPTOMS RELATED TO COMPUTER VISION SYNDROME AND THE CHANGES OF ACCOMMODATION BEFORE AND AFTER VDU WORK

Introduction: Computer Vision Syndrome (CVS) is a combination of eye and vision problem related to prolong use of computer. **Purpose:** To determine the symptoms related with computer vision syndrome and the changes of accommodation components after computer usage among UiTM staff. **Methods:** 34 subjects of UiTM staffs who came to Primary Optometry Clinic (POC) for eye examination and used computer more than 2 hours per day were recruited. Subjects were assessed two times in the same day; before the subject use computer in the morning and the second time was at the end of the workday. A set of questionnaire was given after the second assessment. Assessment of accommodation components involved monocular and binocular amplitude of accommodation, accommodation response, monocular and binocular accommodation facility and negative and positive relative accommodation. **Results:** Mean age of subjects was 32.76 ± 3 years with majority of the subjects (n=24) used the computer for 6-9 hours in a day. All subjects reported there were at least one symptom of CVS after prolong computer use and the most common symptom was tiredness of eye (79.4%). The changes of accommodation components following VDU task was assessed using Wilcoxon Signed- Rank Test. A significant change in right eye accommodative facility ($p=0.006$), left eye accommodative facility ($p=0.004$), binocular accommodation facility ($p=0.023$) and positive relative accommodation ($p<0.05$) was noted at the end of workday. **Conclusions:** CVS has been classified as the number one occupational hazard of the 21stcentury. Thus, ample knowledge on the preventive measure is necessary especially for university staffs to avoid CVS.

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