# B2-1.ICPH

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#### RELATIONSHIP BETWEEN COMPUTER VISION SYNDROME AND A COLLECTION OF MUSCULOSKELETAL PAIN AMONG FREQUENT COMPUTER USERS

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#### ABSTRACT

**Background:** Computer vision syndrome (CVS) is a condition resulting from focusing the eyes on a computer or other display device for protracted, uninterrupted periods of time and the eye muscles being unable to recover from the strain due to a lack of adequate sleep. The visual effects of the computer such as brightness, resolution, and glare are factors that contribute to CVS. Prevention is the most important strategy in managing CVS. This study aimed to determine the relationship between CVS and a collection of musculoskeletal pain among frequent computer users.

**Subjects and Method:** This was a cross sectional study conducted at the Faculty of Medicine, Universitas Diponegoro, Semarang, Central Java. A sample of 30 medical students who frequently used computer was selected for this study. The dependent variables were a collection of musculoskeletal pain including neck pain, shoulder pain, lower back pain, and upper back pain. The independent variable was CVS. The CVS score was measured by CVS Questionnaire. Neck, shoulder, lower back, and upper back pain were measured by Visual Analogue Scale (VAS). The correlation between variables was measured by Pearson correlation.

**Results:** The measurement scores were as follows: CVS (Mean= 13.87; SD= 6.37), neck pain (Mean= 4.87; SD = 1.40), shoulder pain (Mean= 4.40; SD= 1.83), upper back pain (Mean= 4.00; SD = 2.08), and low back pain (Mean= 3.50; SD= 2.12). CVS was positively correlated with neck pain (r= 0.37; p= 0.011), shoulder pain (r= 0.25; p= 0.012), upper back pain (r=0.11; p= 0.219), and lower back pain (r=0.17; p= 0.100).

**Conclusion:** CVS has weak positive correlations with neck pain, shoulder pain, upper back pain, and lower back pain. However, some of the correlations were statistically non significant, calling for further studies with larger sample size.

Keywords: CVS, musculoskeletal pain

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