

ABSTRACT

The Association Study of Risk Factors Affecting the Occurrence of Computer Vision Syndrome in High School Students (The research was conducted at SMAN 2 Jember and SMA Muhammadiyah 3 Jember)

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Computer vision syndrome (CVS) is a collection of various eye symptoms that result from using electronic gadgets. Common symptoms include eye strain, blurred vision, headache, dry eyes, and neck and shoulder pain. Based on research conducted, 61 of 94 students experienced CVS symptoms. This study aims to determine the association of risk factors that influence CVS occurrence in students of SMAN 2 Jember and SMA Muhammadiyah 3 Jember. This type of research is observational with a cross-sectional approach with 94 respondents. Data collection using questionnaires and TBUT examination to assess the stability of the tear film. The data analysis used was descriptive with tabulation of results and the chi-square test. The results showed that the most experienced symptoms are blurred vision (13.8%), and dry eyes (87.2%). The chi-square test showed $p\text{-value}=0.836$, which stated that there was no difference between mild, moderate, and heavy exposure to dry eyes occurrence, because all exposures had the same risk of dry eyes. The daily usage of computer or laptop and smartphone; smartphone only; with various duration, gadget exposures, and lack of rest could lead to an increased risk factor of CVS. It needed pharmacological and non-pharmacological therapies to prevent CVS. This research is expected to be used as a source of information for health workers, educators, and the public regarding the association of risk factors to the occurrence of CVS. It needed pharmacological and non-pharmacological therapies to prevent CVS. This research is expected to be used as a source of information for health workers, educators, and the public regarding the association of risk factors to the occurrence of CVS.

Keywords: CVS, TBUT, dry eyes.