

**ABSTRACT**

**Background:** Suicide is a serious problem, always increase and still cannot be clearly understood the causes. One of suicide method is hanging. Hanging is form of asphyxia means absence of pulsation, an interference with uptake of oxygen (hypoxia), with failure to eliminate carbon dioxide (hypercapnia) caused by a ligature which encircles the neck. The constricting force from weight of the body. **Objective:** This study aims to prove whether sex, age and occupation are risk factors for hanging in Dr. Soetomo hospital 2013-2016. **Methods:** This is analytic study using cross sectional design by obtaining patients data from registration book in the Forensic & Medicolegal Installation of Dr. Soetomo Hospital Surabaya 2013-2016. The variables were gender, age and occupation in asphyxia patients and data was analyzed using cross tabulation, chi-square test with level of significance of 95% ( $p < 0.05$ ) and contingency coefficient. **Result:** 108 patients were identified, involve 45 data hanging and 63 data non hanging. Results showed that there was relation between age with hanging, value of ( $p = 0,036$ ) and contingency coefficient value 0.221. It means a weak relation. But, there was no relation between sex with hanging, value of ( $p = 1$ ). There was no relation between occupation with hanging, value of ( $p = 0,264$ ). **Conclusion:** there was relation between ages with hanging. However, there was no relation between the sex and occupation with hanging. Therefore, need socialization about risk factors to reduce the number of hanging. Moreover, it is also needed to conduct further research using other variables to know the risk factors of hanging certainty.

Keywords: asphyxia hanging, suicide, age, sex, occupation