GENOTYPE IDENTIFICATION AND ANALYSIS OF RISK FACTOR OF HEPATITIS A IN SMPN 29 AND SMP UNESA 2 SURABAYA

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ABSTRACT

BACKGROUND: Hepatitis A is a health problem in the world, including Indonesia. The prevalence and distribution of hepatitis A had been increased since 2011 resulted in the endemic status of hepatitis A in Indonesia. Hepatitis A outbreak in 2013 occurred in 6 provinces about 495 cases, the highest in East Java about 287 cases. In Surabaya increase in the last 3 years about 21 cases in 2013, 40 cases in 2014, and 59 cases in 2015. This study aimed to identification of hepatitis A virus (HAV) genotype and analyzed of risk factor of hepatitis A in SMPN 29 and SMP Unesa 2 Surabaya.

SUBJECT AND METHODS: This was a case-control study conducted in SMPN 29 and SMP Unesa 2 Surabaya, East Java. Study subject were 50 (33 cases and 17 controls). The sampling technique was consecutive sampling. The dependent variable was hepatitis A. The independent variables included habit of washing hands, habit of carelessly snack, and knowledge. The data was analyzed by a multiple logistic regression.

RESULTS: This study showed that sub-genotype HAV is IA. The incidence of hepatitis A related with habit of washing hands (OR=8.70; 95%CI 1.87 to 40.44; p=0.006), habit of carelessly snack (OR=12.08; 95%CI 1.42 to 102.96; p=0.023). The factor do not relate significantly in this study is students knowledge (p=0.531).

CONCLUSION: Sanitation inspection obtained sources of clean water and a school cafeteria does not appropriate health requirements, as well as school toilet has risk. Sources of clean water, school toilets, and the school cafeteria customized with health standards, as well as the need to conduct regular counseling about the behavior of clean and healthy living.

Keywords: hepatitis A, genotype, risk factors, Surabaya