

## **The effect of nitric oxide supplement intake on the value of hematological examination of health workers exposed to Covid-19**

### **ABSTRACT**

Objective: Examination of the diagnostic covid-19 gold standard with real time reverse polymerase chain reaction (RT-PCR) is still limited, so that the initial hematological examination (leukocytes, lymphocytes, neutrophils, platelets, hemoglobin, and neutrophil lymphocyte ratio (NLR) plays an important role in monitoring the course of covid-19 disease. Macrophages release nitric oxide (NO) to kill parasites NO inhibits migration and adhesion of leucocytes to the endothelium. Metode: The research design used preexperimental with one group pre-post-test, the total sample was 80 health workers who were exposed to Covid-19, the independent variable was the provision of NO, and the dependent variable was the result of a hematological examination (leukocytes, lymphocytes, platelets, neutrophils, hemoglobin and NLR). The intervention was given NO 500 mg mixed with warm water 250 cc, given 3 times a day for 5 days, data analysis used the T-test with a significance value of  $\alpha < 0.05$ . Results: There is a difference in the results of the pre and post-test hematology giving NO to the results of the examination of leucocytes  $\alpha = 0.001$ , lymphocytes  $\alpha = 0.000$ , platelets  $\alpha = 0.000$ , neutrophils  $\alpha = 0.000$ , hemoglobin  $\alpha = 0.031$ , and NLR  $\alpha = 0.000$ . Conclusion: Giving NO to health workers exposed to Covid-19 can improve the hematology and immune systems to fight the corona virus.

**Keyword:** Nitric oxide, Hematology, Covid-19