

## ABSTRACT

### **Drug Utilization Study of Magnesium Sulfate in Severe Preeclampsia (Study at Delivery Room Obstetric Gynecology Department Dr. Soetomo Hospital Surabaya)**

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Magnesium sulfate is the drug of choice for prevention of seizures as part of comprehensive management of preeclampsia. Despite the compelling evidence for the effectiveness of magnesium sulfate, concern has been expressed about its safety and potential for toxicity. This study aims to identify drug utilization pattern and analyze Drug Related Problem (DRP) of Magnesium sulfate on severe preeclampsia in Dr. Soetomo Hospital. It was observational study with retrospective method. Total sample obtained were 73 severe preeclampsia patients. Doses of Magnesium sulfate used was 4 g of MgSO<sub>4</sub> 20% solution intravenously, 10 g of MgSO<sub>4</sub> 40% intramuscularly, and 1 g/hour of MgSO<sub>4</sub> 40% by syringe pump. It was given up to 12 hours postpartum. For patients with pulmonary edema, administration of Magnesium sulfate was postponed. The dosage was given to severe preeclampsia patients is accordance the guidelines used in Dr. Soetomo Hospital. The result showed that there was no seizure after administration of Magnesium sulfate and while MRS to KRS. The symptoms of drug interactions and side effects of Magnesium sulfate was not found in all patients. Measuring the levels of magnesium in the blood is needed to predict the side effects on the fetus. Further research is needed to identify side effects such as flushing or nausea and vomiting.

Keywords: Magnesium sulfate, preeclampsia, drug utilization, pregnancy