

**ABSTRACT**

**Drug Utilization Study of Antihypertensive Agent  
in Pediatric Patients with APIGN  
(Acute Post Infectious Glomerulonephritis)  
Study at Inpatient Care Unit of Pediatric Department  
at Dr. Soetomo Teaching Hospital Surabaya**

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Acute post infectious glomerulonephritis (APIGN) is an autoimmune disease that begins with the infection of upper respiratory tract and skin, caused by bacteria, viruses, parasites and fungi, especially the antigenic group A streptococcal  $\beta$ -hemolytic streptococcus. APIGN is characterized by symptoms such as edema, oliguria, hypertension, hematuria, proteinuria and renal impairment. One of symptomatic therapy for APIGN patients is antihypertensive agent. The target blood pressure according to The American Academy of Pediatrics Fourth Report is  $<90^{\text{th}}$  percentile or  $<130/80$  mmHg based on child's age and height. The purpose of this study was to analyze the profile of the antihypertensive agent in regards to the dose and route of administration as well as the frequency of drug use in pediatric patients with APIGN. This study was conducted retrospectively from January 2015 to December 2017. This study has gained ethical clearance from The Ethical Committee of Dr. Soetomo Teaching Hospital Surabaya. The samples in this study were pediatric patients diagnosed with APIGN with or without complications receiving antihypertensive agent therapy. The number of patients fulfilled the inclusion criteria were 25 patients. The results showed that the the most commonly used antihypertensive agent in pediatric patients with APIGN were diuretics, especially furosemide (96%); followed by CCB including amlodipine (84%) and nifedipine (52%); ACE inhibitors including captopril (36%) and lisinopril (4%); ARB especially losartan (4%). The use of doses and frequencies in patients was generally in accordance with the guidelines of Dr. Soetomo's clinical practice. The most route of administration used was oral, but some antihypertensive agent were administered intravenously and sublingually routes.

**Keywords:** acute post infectious glomerulonephritis, APIGN, pediatrics, antihypertensive agent, diuretics, CCB, ACE inhibitor