

ABSTRACT

**PREVALENCE AND HEMODYNAMIC OUTCOME OF DENGUE
SHOCK SYNDROME IN CHILDREN ATTENDING THE DEPARTMENT
OF PEDIATRIC, DR. SOETOMO GENERAL HOSPITAL**

Fenska Seipalla. Ira Dharmawati. Sundari Indah Wiyasihati.

Fakultas Kedokteran Universitas Airlangga

Introduction : The prevalence of Dengue infection has increased markedly worldwide. Dengue shock syndrome (DSS) is a severe manifestation of dengue virus infection. Higher mortality of DSS was found in children. This study's aim was to portray prevalence and hemodynamic outcome in children attending the department of pediatric in Dr. Soetomo General Hospital.

Methods : A Descriptive Retrospective study of children aged <15 years old with DSS was performed and evaluated from 2013-2016. We determined the prevalence and hemodynamic outcome associated with DSS in 35 out 44 samples. The samples were divided into 5 groups, aged <1 years old, 1-2 years old, 3-5 years old 6-11 years old and 12-15 years old. Data were taken secondarily and calculated with Microsoft Excel 2010.

Results: The most common findings were prevalence of DSS in 6-11 years old group and mortality rate in <1 years old group. Maximum pulse of 178 beats/minute and minimum systolic pressure of 70 mmHg were observed in 3-5 years old group. Minimum diastolic pressure of 40 mmHg and pulse pressure of

10 mmHg were observed in 1-2 years old group. Highest number of respiratory rate was found in 3-11 years old children with 60 breaths/minute. Lowest number of *Mean Arterial Pressure* was found in 1-5 years old children with 57 mmHg. Lastly, the majority of prolonged *Capillary Refill Time* (CRT) >2s was found in children below 2 years old.

Conclusions: The hemodynamic outcome varies on each group based on age. Disease incidence of DSS cases remained the highest in older children but mortality rates were the highest in younger children. Predictors of mortality from DSS were not identified in this study.

Keywords: Dengue Shock Syndrome, Pediatrics, Hemodynamic, Prevalence, Indonesia