

The Relationship Between Age, Gender, Platelet Count, Leukocyte Count, and Duration of Fever before Admission with Length of Stay (LOS) of Dengue Patients at Kaliwates General Hospital, Jember
Efri Tri Ardianto, S.K.M., M.Kes (*Supervisor*).

Erlisa Azzahra
Health Information Management Study
Department of Health

ABSTRACT

Dengue fever is a disease caused by the dengue virus and transmitted through the bite of Aedes aegypti mosquitoes.. Dengue fever is among the 10 most common diseases at Kaliwates General Hospital, Jember. During the 2022–2024 period, there was a considerable increase in the number of cases. One of the important indicators in hospital services is the Length of Stay (LOS) or number of days of hospitalization. In 2024, there were 49 dengue fever patients whose LOS exceeded the standard length of hospitalization (>5 days). This study aimed to determine the relationship between age, sex, platelet count, leukocyte count, and duration of fever before admission with the LOS of dengue fever patients at Kaliwates General Hospital, Jember. Based on this condition, it is necessary to analyze which factors are associated with the patients' length of hospitalization. This research used a quantitative method with a cross-sectional approach. Data were obtained from the medical records of 245 patients and analyzed using the chi-square test. The results showed that the variables associated with LOS in dengue fever patients were age ($p = 0.017$), leukocyte count ($p = 0.027$), and duration of fever before admission ($p = 0.000$). The variables that were not associated with LOS were sex ($p = 0.067$) and platelet count ($p = 0.562$). The conclusion of this study is that patients aged under 18 years with low leukocyte levels ($<5,000$) and a fever duration of ≤ 3 days before admission tend to have a longer LOS. It is recommended that the hospital provide more intensive care for patients in this category in order to prevent prolonged hospitalization.

Keywords: dengue, length of stay, medical records