

# ASSOCIATION BETWEEN ENVIRONMENTAL SANITATION AND INCIDENCE OF DENGUE HEMORRHAGIC FEVER IN AN ENDEMIC AREA

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## ABSTRACT

**Background:** Dengue Hemorrhagic Fever (DHF) continues to be a major public health problem in Indonesia. Rowosari sub-district is an endemic area in Semarang, Central Java, with a cumulative incidence of 3.42 new cases per 10.000. This study aimed to determine the association between environmental sanitation and incidence of DHF in a DHF endemic area.

**Subjects and Methods:** A case control study was conducted in a DHF endemic area, Puskesmas Rowosari, Semarang, Central Java. A sample of 50 study subjects was selected for this study, consisting of 25 DHF cases and 25 controls. The dependent variable was the incidence of DHF. The independent variable was environmental sanitation. DHF data were taken from medical record. Environmental sanitation data were collected by checklist and field observation. The data were analyzed by a logistic regression.

**Results:** The risk of DHF increased with poor environmental sanitation (OR=2.56; p=0.002).

**Conclusion:** The risk of dengue hemorrhagic fever increases with poor environmental sanitation.

**Keywords:** dengue hemorrhagic fever, environmental sanitation

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