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ABSTRACT

Title of Abstract : Descriptive Study of Waste Management, Sanitation, and Environmental Factors Affecting Mosquito Breeding in Karang Tunggal Village

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Background : Environmental health in Rejo Sari Hamlet, Karang Tunggal Village, Tenggaraong Seberang District, particularly in RT 05, 06, 07, and 17, remains suboptimal due to the accumulation of inorganic waste, the habit of burning garbage, and limited sanitation facilities such as proper latrines and drainage systems. This condition is exacerbated by the low utilization of mosquito-repellent plants, poor household ventilation, and high humidity that supports the breeding of *Aedes aegypti* mosquitoes, the vector of dengue fever.

Objective : To identify and analyze the environmental health conditions in Karang Tunggal Village, Tenggaraong Seberang District, focusing on waste management, sanitation, and environmental factors contributing to the risk of mosquito-borne diseases.

Research Methods/ Implementation Methods : This study employed a descriptive survey method with both quantitative and qualitative approaches. Data were collected through direct environmental observations, interviews with residents and community leaders, and questionnaires related to waste management, sanitation facilities, and community hygiene behavior. The data were analyzed descriptively to obtain a comprehensive overview of the environmental health conditions.

Results : The findings revealed the accumulation of inorganic waste due to the lack of waste collection facilities and inadequate household waste management. Sanitation conditions were also substandard, with poor ventilation and high humidity supporting mosquito breeding. Interviews showed that 81.7% of respondents still burned household waste, while 78.9% used window screens as a preventive measure against vector-borne diseases. Prior to the educational intervention, most residents were unfamiliar with the 5R concept; however, after the activity, knowledge and understanding of waste segregation and recycling practices improved significantly.

Conclusion/Lesson Learned : Environmental health conditions in Karang Tunggal Village remain a significant concern, particularly in waste management and mosquito control. Focused interventions on improving sanitation facilities, enhancing community education on waste management, increasing household ventilation, and promoting the use of mosquito-repellent plants are essential to improve environmental quality and prevent disease transmission.

Keyword : Environmental health; Waste management; sanitation; household ventilation; mosquitoes; vector-borne disease; Karang Tunggal Village.