FORMULATION OF ENVIRONMENTAL AND BEHAVIORAL INDEX TO PREDICT AN INCREASE IN CASES OF DENGUE FEVER IN THE DISTRICT TANETE RIATTANG AND WESTERN DISTRICTS BONE RIATTANG TANETE

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Abstract

This study aims to formulate environmental and behavioral indices to predict an increase in cases of dengue fever in the district Tanete Riattang and Tanete Riattang Western District of Bone.

This study uses observational analytic design with cross sectional study design. The sample size of 320 households and sample selection method is first created block by neighborhood and then from each block have been 20 (two pulh) households randomly (simple random sampling). Analysis of data using Confirmatory Factor Analysis (CFA) with the program Linear Structural Relationships (LISREL).

The results showed that: the environmental index for predicting cases of dengue fever in the district Tanete Riattang and Tanete West Riattang Bone regency are:

\[
\text{Environmental} = 0.67 \text{ lighting} - 0.54 \text{ water reservoirs} - 0.18 \text{ larva existence} + 0.9 \text{ occupant density.}
\]

The index to predict the behavior of dengue cases in the District Tanete Riattang and Tanete Riattang West County Bone is:

\[
\text{Behavior} = 0.16 \text{ TPA cleanliness} + 0.72 \text{ Closing the landfill} + 0.70 \text{ Drain TPA} + 0.70 \text{ bury thrift} + 0.55 \text{ landfills} + 0.61 \text{ hang clothes} + 0.48 \text{ nets} + 0.56 \text{ wear mosquito repellent} + 0.52 \text{ sowing abate.}
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Keywords: Index, Environment, Behavior, Dengue