ABSTRACT

Modeling and Simulation Spreading Dengue Disease in Bandung City using Cellular Automata aims to make modeling and simulation of disease spread, application of Cellular Automata method in the spread of DHF disease, find MRI value that can approach RIA value, and find threshold approaching RIA on every year of occurrence. The application of Cellular Automata in cases of DHF spread will be maximized when weighting and mathematical models are determined appropriately, this problem arises when no simulation results meet the validation requirements of a simulation program. In addition, resource constraints are also an impediment to model makers. The possibility of cell area has the same role to get the result which is close to the actual state, as the simulation result which has been obtained from different cell area can still produce simulation program which is close to the actual condition, but validation process still need to be done to check the status of the simulation program whether the created simulation program is valid. The error rate or error rate generated in the case of DHF spread is 0.611609% and has a valid status because the result is still below 5%.