SPR_ SODE MODEL FOR DENGUE FEVER

S. DHEVARAJAN¹, A. IYEMPERUMAL², S. P. RAJAGOPALAN³ & D. KALPANA⁴

¹Assistant Professor, Dr. MGR Educational and Research Institute University, Chennai, Tamil Nadu, India
²Professor, Dr. MGR Educational and Research Institute University, Chennai, Tamil Nadu, India
³Professor Emeritus, Dr. MGR Educational and Research Institute University, Chennai, Tamil Nadu, India
⁴Senior Lecturer, Department of Chemistry, PSB Polytechnic College, Chennai, Tamil Nadu, India

ABSTRACT

Millions of people are travelling from country to country every day. The major threat is disease spreading that causes greater health hazards [9]. Dengue fever is one of the emerging threats now a days throughout the world spread by mosquitoes. The mosquito, "Aedes Ageypti" performs the work of a carrier (i.e) the medium for transmitting, for the spread of Dengue fever (DF).

In this paper, Stochastic Ordinary differential equation model (SODE) for DF is proposed for the spread of DF. One can understand the underlying processes and develop effective prevention strategies

KEYWORDS: Dengue Fever, Death, Infection, ODE, Probability, Recovery, Susceptible