

## **ON THE SPREAD AND STABILITY OF GONORRHEA AMONG HOMOSEXUALS**

**R.RAMAKISHORE AND N.CH.PATTABHIRAMACHARYULU**

### **Abstract**

In this paper a mathematical model of gonorrhoea among homosexuals is presented. This model is characterized by a pair of non-linear first order ordinary differential equations reflecting the balances of growth rates of (promiscuous) susceptibles and infectives in a homosexual population. In all three equilibrium points are identified for the system under investigation. The criteria for the asymptotic stability of all the three possible equilibrium points are derived.

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