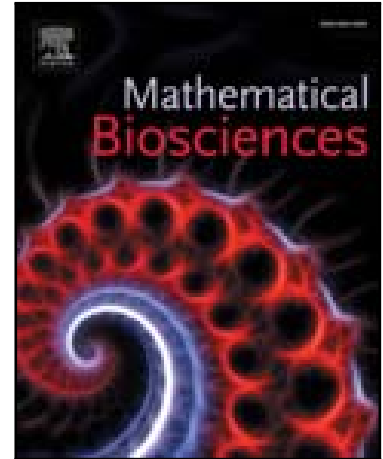


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Dynamics of vaccination in a time-delayed epidemic model with awareness

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**Highlights**

- A mathematical model of the spread of disease and awareness is considered
- Effects of vaccination and the awareness delay are investigated
- Stability of all steady states is determined depending on system parameters
- Numerical bifurcation analysis and simulations are performed to support analytical results

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