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THE EXISTENCE OF MULTIPLE DECISIONS FOR VACCINATION IN THE REINFECTION SIRI MODEL

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ABSTRACT

In this work we analyze people behavior with respect to vaccination, if this is a voluntary option. When one individual have to decide between vaccinate or not, several things are taken into account: the morbidity risks of the vaccine; the morbidity risks of the disease; the decisions of all other individuals... For diseases modeled by the classical SIR model, the decision of each individual is well characterized regarding the morbidity risks[1]. Considering the SIRI model, by introducing reinfection in the SIR model, we observe the existence of multiple decisions for the same level of the morbidity risks[2], revealing a further diversity in people's decisions for different epidemic models.

References

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