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Impact of demography on the dynamics of malaria

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Epidemiological models should account for the vital dynamics when the disease duration is comparable with the lifespan of affected individuals, the disease is lethal or recurring, or when we study the disease's long-term impact on the population. The authors often use ad hoc or generic population equations to describe the vital dynamics. In the talk, using a malaria model as an example, we shall show that the used population model can dramatically affect the dynamics of the disease, and therefore the selection of the latter requires extreme care.

Keywords: mathematical modeling, demography, malaria, transmission blocking drugs

References

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