

Review of: "A Mathematical Characterisation of COVID-19 in Mauritius"

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Potential competing interests: No potential competing interests to declare.

In this article, characteristics of pandemic wave of COVID-19 in Mauritius is studied by determining the values of certain parameters, like Case Fatality Rate (CFR), Case Mortality Rate (CMR), and the basic reproduction number (R_0). The variation of total cases per day (unit of time) assumes a S-shaped curve if certain measures are imposed for controlling the pandemic. Here the data for Mauritius is taken and fitted with the S-curve for determining the values of total value (M), slope of the curve (alpha), and time delay (t_0), for the first and second waves. Normalized ceiling value in terms of M per capita is estimated and compared with a number of countries. The study predicts that the performance of Mauritius in contrilling the pandemic is quite well and close to Australia. Value of R_0 is estimated from the growth rate of infections. R_0=3.03, which is higher than western Europe. Finally, CFR and CMR are determined for Mauritius and compared with some other countries. In my opinion, the estimated values are determined following the standard norms, and so they are correct. So, this study provides an overall picture on the behaviour of COVID-19 pandemic waves prevailed over Mauritius.

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