

Title. *Prediction of growth and review of factors influencing the transmission of Covid19*

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Abstract

The coronavirus (SARS-CoV-2) emerged at china and quickly out broke into a pandemic around the world. This is a virus which is said to have neither a carrier nor a vector. The medium of the spread is the personal contact to infected human via droplets oozed out from respiratory channels, contaminated hands or surfaces. There are claims that high temperature will effectively reduce the transmission of the new coronavirus (COVID-19). But this study is inclined to differ. We in this paper state that the reproductive ratio, R_0 play a significant role in the transmission of Covid19. The factor R_0 depends on the two parameters namely i) E , the average number of people infected exposed and ii) p , the probability such a person causing a new infection. We have formulated the prediction of the exponential growth of infected cases of covid19 based on the above parameters. Moreover, we have also reviewed the effect of temperature and humidity and social distancing in the spread of Covid19. Our findings indicate that high temperatures and high humidity yield the weak inference in reducing the transmission of covid19; however, the transmission of Covid19 depends on only two factors E and p in the subtropical countries such as Malaysia, Indonesia, Thailand and India. Complete social distancing is the only effective option for containment of the spread of Covid19.