

# Assessment of characteristics and conditions before the end of lockdown

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## Abstract

After months of blockades and restriction, the decision of the best time to end the lockdown after the first wave of the COVID-19 pandemic is the big question for health rector. This study aimed to evaluate the characteristics and conditions for ending the blockade after the first wave of COVID-19. Data on the variables of interest were subjected to linear and non-linear regression studies to determine the curve that best explains the data. The coefficient of determination, the standard deviation of  $y$  in  $x$ , and the observed curve of the confidence interval were estimated. Regression which was estimated, subsequently revealed the trend curve. The study found that all dependent variables tend to decrease over time in a quadratic fashion, except for the variable for new cases. In general, the  $R^2$  and mean absolute percentage error (MAPE) estimated were satisfactory: gradual and cautious steps should be taken before ending the lockdown. The results suggested that surveillance of crucial indicators (e.g., incidence, prevalence, and PCR test positivity) should be maintained before lockdown is terminated. Moreover, the findings indicated that long-term preparations should be made to contain future waves of new cases.

## Author keywords

COVID-19

Forecasting

Lockdown

SARS-CoV-2