## Different containment strategies on COVID-19 infection and its impact

Kyaw Ko Latt<sup>1</sup>, Muhammad Amir Naim Aziz<sup>2</sup>, Adailton Aron Marcus<sup>2</sup>, Ahmad Syahid Samad<sup>2</sup>, Muhammad Syamil Aizat Harun<sup>2</sup>, Hussain RA Saadi<sup>1</sup>, Davinder Singh Bagher Singh<sup>1</sup>

<sup>1</sup>Faculty of Medicine, Royal College of Medicine Perak, Universiti Kuala Lumpur, Ipoh, Malaysia, <sup>2</sup>Year 4 MBBS Students, Royal College of Medicine Perak, Universiti Kuala Lumpur, Ipoh, Malaysia

## **ABSTRACT**

Introduction: In the earlier days of COVID-19 pandemic, the cases grew rapidly in an increasing number of countries, triggering bold policy responses. The impact of different containment strategies had yet to show any relationship with the cases. It became a question that would strict restriction in any way impact the spread of infection significantly and should it be a common practice among everywhere else in the world. Therefore, policy makers wondered if strict restrictions would impact the spread significantly and should this be practiced elsewhere in the world. Materials and methods: This rapid review assessed the effectiveness of different containment strategies used in suppressing COVID-19 infection in different countries from January 2020 to November 2020. Searches were done in PubMed, Cochrane Central Register of Clinical Trials, WHO database, ResearchGate. We identified 492 studies and screened for duplication. Using the inclusion and exclusion criteria, 25 studies were included. Results and conclusion: Different countries instituted containment strategies in different ways, such as Movement Control Order in Malaysia, Circuit Breaker in Singapore, COVID-19 Alert System Levels in New Zealand, etc. Most containment strategies had different success levels that depended on the time of implementation and whether the community accepted these new lifestyles and regulation. Sweden and New Zealand showed a high degree of success in combating COVID-19 despite their big population and less personal invasive methods in terms of containment strategies. Countries like United States, Japan, Singapore, Malaysia, and South Korean's responses to COVID-19 could be hard to replicate. However, all countries needed to improve on three main competencies, namely, technology enforcement, strong public health governance and public partnership. A nationwide lockdown could not promise a country to be free from the outbreak, but the response time and early detection with active surveillance was critical in slowing the spread and growth of new cases in managing this pandemic.

Keywords: COVID-19 infection, impact, containment strategy, pandemic management