Impact of social distancing on covid-19 and other related infectious disease transmission: A systematic review

ABSTRACT

Similar to other coronaviruses, COVID-19 is transmitted mainly by droplets and is highly transmissible through close proximity or physical contact with an infected person. Countries across the globe have implemented public health control measures to prevent onward transmission and reduce burden on health care settings. Social or physical distancing was found to be one of appropriate measure based on previous experience with epidemic and pandemic contagious diseases. AIM: This study aims to review the latest evidence of the impact of social or physical distancing implemented during COVID-19 pandemic toward COVID-19 and other related infectious disease transmission. The study uses PRISMA review protocol and formulation of research question was based on PICO. The selected databases include Ovid MEDLINE and Scopus. Thorough identification, screening and eligibility process were done, revealed selected 8 articles. The articles then ranked in quality through Mixed Method Appraisal Tool. A total of eight papers included in this analysis. Five studies (USA, Canada, South Korea and the United Kingdom) showed physical distancing had resulted in a reduction in Covid-19 transmission. In comparison, three other studies (Australia, South Korea and Finland) showed a similar decline on other infectious diseases (Human Immunodeficiency Virus, other sexually transmitted infections, influenza, respiratory syncytial virus, and Vaccine-Preventive Disease. The degree of the distancing policy implemented differs between strict and lenient, with both result in effectiveness in reducing transmission of infectious disease. Physical or social distancing may come in the form of extreme or lenient measure in effectively containing contagious disease such as COVID-19, however the stricter the measure will give more proportionate impact toward the economy, education, mental health issues, morbidity and mortality of non-COVID-19 diseases. Since we need this measure to ensure the reduction of infectious diseases transmission to help flattening the curve which allow much needed time for healthcare system to prepare adequately to response, "Precision physical distancing" can be implemented which will have more benefit toward the survival of the community as a whole.