COVID-19 Pandemic in Low and Lower Middle-Income Countries

Emerging infectious diseases remain public health challenges with serious socio-economic and political consequences. COVID-19, a highly contagious viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first detected in the city of Wuhan, China in December 2019 and has now spread to all countries of the world. Statistical and mathematical approaches to infectious disease modelling are extremely useful during outbreaks. They provide information such as the likelihood of introduction and spread of infection, the effectiveness of public health interventions that have been implemented as control measures across different locations and disparities of risk of infection due to demographic characteristics. This session considers some approaches to understanding the dynamics of COVID-19 viral infection in Low- and Lower Middle-income countries (L-LMICs). The session starts with an introduction to the early global dynamics COVID-19, followed by a talk on some approach of disease mapping with applications to COVID-19 data in some L-LMICs. The third session will feature a talk on mathematical models and their applications to COVID-19 data. The session will conclude with a talk on the economic implications of COVID-19 in L-LMICs.

The presenters and the titles of their talks are as follows:

Dr Oyelola Adegboye[1]: Introduction to the early global dynamic of COVID-19. He will moderate the session

Dr. Ezra Gayawan: Some approaches to disease mapping with applications to COVID-19 data

Dr. Adeshina Adekunle[1]: Mathematical models of SARS-CoV-2 dynamics in L-LMICs

Dr. Anton Pak[1]: COVID-19 Economic Implications for L-LMICs.

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