
JACQUES BELAIR, Université de Montréal

Modelling the use of Fangsang shelter hospitals in Wuhan

Motivated by China's experience of using Fangcang shelter hospitals (FSHs) to successfully combat the epidemic in its initial stages, we present a two-stage, functional differential delay model considering the average waiting time of patients' admission to study the impact of hospital beds and centralized quarantine on mitigating and control of the outbreak. We compute the basic reproduction number in terms of the hospital resources, and perform a sensitivity analysis of the average waiting times of patients before admission to the hospitals. We discuss the rôle played by FSHs in mitigating and eventually curbing the epidemic.