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How Wuhan Curbed the COVID-19? A data-driven modeling study

In this paper, I will present data-driven modeling studies to mimic the transmission of the virus in Wuhan, incorporating the number of hospital beds in both designated and mobile cabin hospitals, in particular the number of mobile cabin hospitals used to isolate large numbers of confirmed cases. Our findings indicate that while designated hospitals saved the lives of the severely infected, it was a large number of Fangcang Shelter Hospitals, and thus, the extra hospital bed capacity, that helped slow down and eventually stop the epidemic of COVID-19 in Wuhan. Given the current global pandemic situation of COVID-19, this study suggests that, whenever possible, increasing the hospital bed capacity together with the healthcare personnel within an affected region is key to curbing the outbreak.