

# Dual Burden of COVID-19 and Dengue on Weak Health System of Pakistan

Sumera Naz

Pakistan Health Research Council, Islamabad.

Since December 2019 there is exponential spread of deadly disease COVID-19 across the globe that has equally affected developed, developing and underdeveloped countries. Globally as of 26<sup>th</sup> October 2020 there are 4.3 billion reported cases and 1.16 million deaths from COVID-19 and in Pakistan there are 0.32 million reported cases with 6739 death, since first case was detected on 26 February 2020.<sup>1</sup>

During this difficult time the weak health systems of developing countries including Pakistan are under threat of dengue outbreak, which is a viral disease spread by mosquito vectors, *Aedes aegypti* and *A. albopictus*. As per recent data of WHO there are approximately 100 to 400 million reported cases of dengue fever infections per year and approximately 25 000 annual deaths.<sup>2</sup> Even though 129 countries are at risk of dengue infection, data showed that in past Asia was badly affected by the virus and this continent had around 70% of global Dengue burden.<sup>3</sup> Pakistan is dengue endemic country for the last 30 years. In recent outbreak of 2019, there were 47120 reported cases of dengue fever which were 15 times higher than 2018 where reported cases were only 3204.<sup>4</sup>

Management of pandemic is not only a challenge but also a very stressful task which need consistent coordinated efforts of different departments of government machinery. Pakistan being a developing country only spent less than 1% GDP on health,<sup>5</sup> with such limited resources pandemic management is mammoth task. In this scenario if dengue and COVID-19 both hit the country simultaneously the crises for disease management will aggravate. During the peak days of first wave of pandemic Indoor hospital patients requiring intensive care touched the saturation point. Although in terms of confirmed cases of COVID-19, Pakistan is the 18<sup>th</sup> most-impacted country,<sup>6</sup> but with

high population density of 287 people/ Square Km there is a potential risk of rapid spread of disease. With this threat we are also at risk of dengue outbreak in coming days and if number of infected cases reaches to level of last years it may trigger an alarming health crisis in the country.

Possible way forwards to avoid such gloomy situation are more budget allocation not only for active surveillance, testing and massive disinfection but also for the research on epidemiology, development of diagnostics, vaccine and electromedical devices along with implementation of prevalence measures. These strategies will not only help us to efficiently face this expected challenge of dual burden of COVID-19 and Dengue infection but will also enhance our capacity to respond effectively in future pandemics. However, we are very optimistic because even with our limited resources as WHO had already listed Pakistan among six countries from which the international community should learn how to deal with the Covid-19 pandemic.

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## Corresponding Author:

Sumera Naz

Pakistan Health Research Council, Islamabad.  
Email: naz.sumera@gmail.com

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