

## Editorial

### Antimicrobial Resistance in Pandemic of COVID-19

Muhammad Faheem Afzal

#### Author's Affiliation:

1- Department of Paediatric Medicine, Lahore General Hospital, Pakistan.

#### Correspondence:

Muhammad Faheem Afzal, Email: mfaheem169@yahoo.com

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During pandemic of coronavirus disease 2019 (COVID-19), the world is facing another even greater and silent pandemic, which is antimicrobial resistance (AMR). AMR is prematurely killing thousands of people worldwide.<sup>1</sup> The coronavirus disease 2019 (COVID-19) pandemic has had a substantial impact on health systems globally, affecting the management of other health threats, such as antimicrobial resistance (AMR). The World Health Organization (WHO) has declared the AMR as one of the top ten global health threats.<sup>2</sup> AMR increases the healthcare costs, hampers the control of infectious diseases and has the potential to threaten health security, and weaken trade and economies.<sup>3</sup>

During COVID-19 pandemic, overuse of antibiotics was observed. The apparent rationale for prescribing antibiotics in these patients might be due to the previous experience with increased mortality in patients due to bacterial super-infection in influenza, where many studies demonstrated initial co-infection or secondary bacterial pneumonia in hospitalized patients.<sup>4</sup> In this context, effort for better care of COVID-19 patients with best available guidelines has inadvertently declined the adherence to stewardship programs.<sup>5</sup>

The global threat of AMR will persist beyond the COVID-19 crisis. Experts have highlighted the link between COVID-19 and AMR, indicating that certain changes, such as increased antimicrobial use, could drive an increase in AMR; while other activities, such as improved infection prevention and control (IPC), might reduce AMR rates.<sup>6</sup> The targeted, rational treatment of secondary bacterial infections should be an integral part of pandemic planning. There are few challenges. In developing countries like Pakistan, there is lack of resources for AMR surveillance programs. There is increase in pre-emptive antibiotic prescribing to prevent secondary bacterial infections. Also are the delays in AMR legislation. However, there are few opportunities as well. We may integrate AMR risk into investment practices and prioritize antimicrobial stewardship program. We may work on development of rapid diagnostics. There is need to develop political will on AMR, and make collaborative public information campaigns to combat the threat of this silent pandemic.

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