

## EDITORIAL

## SECOND WAVE OF COVID-19 PANDEMIC IN PAKISTAN; REASONS AND MITIGATION MEASURES

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The “second wave” of COVID-19 pandemic is finally here and is spreading rapidly across all regions of Pakistan with an increase in active cases and hospitalization of critical patients.<sup>1</sup> The strict policies enforced across Pakistan in April-June 2020, were followed by gradual ease of the lockdown with many social, political, religious, and regular business activities opening up.<sup>2</sup> This new wave requires urgent national action where the public needs to follow health guidelines. However, both the government and the public are still not taking the pandemic seriously. With a raging pandemic, public is apparently showing very little consideration for preventive measures. There is an increase in social gatherings, out of home activities, holding and attending public gatherings without wearing masks, insisting on shaking hands, lack of physical distancing, and unwilling to pay heed to appeals for caution. The number of COVID-19 cases started climbing with the start of winter. The ground was all set for explosion in number of cases in Pakistan and is likely that circulation of the SARS-CoV-2 will not stop here and it is highly probable that COVID-19 will become a persistent infection if the lessons are not learnt.<sup>3</sup>

The first wave claimed 6795 lives, infected 332,186, left behind 632 on ventilators, and affected millions of people socio-economically and now we have to see how the second wave will behave in terms of severity and outcome. Pakistan reported the highest number of COVID-19 cases on June 14 when 6,183 new cases were registered in the first wave. Since then, the number of new cases/day had drastically come down to few hundreds only. However, since mid-October, the number of cases has once again started to rise.<sup>4</sup> On November 26, the country reported 2,938 new cases, highest in the last four months. Government of Pakistan has already notified on October 28, 2020, that the second wave of the pandemic has started. This has been documented with the rise from few hundred cases (~500) to now more than 3000 cases daily. As of 13<sup>th</sup> December 2020, there is a steady rise in active cases from 6,000 to 45, 124 with 1,688 currently hospitalized cases and 8,724 total deaths so far (CFR: 2%). The national COVID-19 positivity rate has also risen from less than 2% to more than 8%.<sup>5</sup> The first wave started with one case and had a gradual rise to its peak. However, the second started with thousands of already +active cases in the community so it is natural that the second wave seems to be more severe with a sudden large case load reflected in the national COVID-19 database.

The second wave in Pakistan can be attributed to many reasons such as poor compliance to SOPs, lack of a stringent policy, colder weather, drier winter air, traditional wedding season, non-availability of a specific antiviral or a vaccine, limited diagnostics facilities, the opening of schools, colleges and universities and businesses and recent political activities with large scale public gatherings. The complacency showed after apparent success and the premature celebrations in control of the pandemic are the major reasons that led to normalization and return to pre-pandemic normal life activities.<sup>6</sup> The recent resurgence of cases and undetected transmission among younger and healthier populations suggests that the COVID-19 outbreak will likely continue for the foreseeable future until a safe and effective vaccine becomes widely available. The return to normal activities with limited SOPs in the last few months allowed the virus to spread to the susceptible population. Preliminary data suggests that the younger population is more affected in terms of numbers, severity, and hospitalization unlike the first wave when high-risk individuals (age >70 years, diabetes mellitus, ischaemic heart disease, hypertension, chronic lung disease, and immune-suppression) were mostly affected. Over the last few months, the medical community has been privy to new emerging information about the epidemiologic characteristic, presentations, diagnosis, treatment, outcome, prevention and other crucial aspects of COVID-19. However, there are no specific antiviral treatments available whose efficacy has been established. Supportive care is advised with timely intervention of the critical patients with respiratory distress.

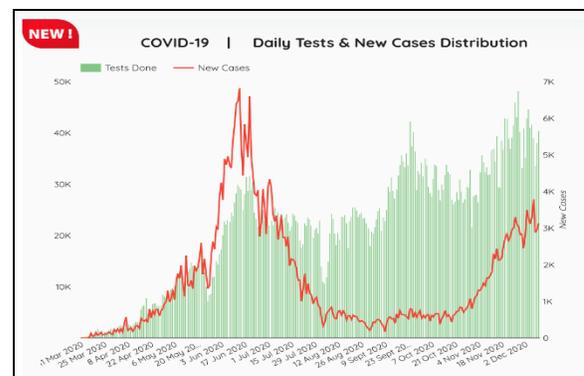


Figure-1: The second wave of Pakistan  
(<https://covid.gov.pk/stats/pakistan>)

The global endeavour to produce COVID-19 vaccines has begun to bear fruit. Currently, 57 vaccines are in clinical trials including 15 in Phase 3. At least 86 pre-clinical vaccines are under active investigation in animals. After very promising results, 5 vaccines have received limited or early approval for human use and 2 have full approval. In November 2020, New York based Pfizer and the German company BioNTech made history by presenting preliminary data indicating that their coronavirus vaccine was over 90% effective. A week later, Moderna reported similar findings with a similar vaccine. Since August 2020, Chinese company CanSino began running Phase 3 trials in several countries, including Mexico, Pakistan, and Russia. In Pakistan, as of December 11, 2020, more than 12 thousand volunteers have completed the vaccination out of a total of 18 thousand planned volunteers in 5 five trail sites.<sup>7</sup> Preliminary results are expected in the next few weeks to months.<sup>8</sup> The Government of Pakistan is in talks with different pharmaceutical companies for access to COVID-19 vaccines and has allocated \$250 million for the purchase of vaccines in the first phase to vaccinate high risk populations such as the elderly (>65 years old) and healthcare workers. It will be a momentous task to vaccinate the nearly 221,000,000 people of Pakistan and therefore it will be ideal to start manufacturing these vaccines locally on a long-term basis.<sup>9</sup>

Over 172 economies including Pakistan have joined forces to participate in COVAX, a global initiative aimed at working with vaccine manufacturers, to provide global equitable access to safe and effective vaccines. COVAX has the world's largest and most diverse COVID-19 vaccine portfolio. It is the only global initiative that is working with governments and manufacturers to ensure COVID-19 vaccines are available worldwide to both higher-income and lower-income countries.<sup>10</sup> Globally, this pandemic continues to pose significant health, social, administrative, and operational challenges for leaders from all sectors for its containment and mitigation. First wave provided the opportunity to learn and test intervention to effectively control the pandemic. Therefore, during this second wave, even countries like Pakistan are well prepared and they should be able to address this challenge. Most public and private sector hospitals across major cities now have better equipped ICUs with ventilators to take care of critically ill patients. However, even now Pakistan must come together to face this second wave of COVID-19 to ensure better outcomes for the patients. The National Institute of Health (NIH) has been at the forefront with public awareness, devising and circulating protocols, advisories, SOPs, etc. Federal and provincial governments must work in cohesion by putting up and sticking to the National Action Plan. Preventive measures need to be

reinforced everywhere such as hand hygiene, cough etiquettes, self-isolation, and social distancing to prevent community transmission. Hospitals and other health care setups must be upgraded to provide optimal care to those that require hospitalization and critical care. Infection control measures must be enhanced to encourage compliance by all HCWs and follow established guidelines.

Looking forward to 2021, it seems to be as challenging as the 2020 despite the development of a vaccine or any effective treatment. We need to live with this pandemic and modify our lives by taking all possible preventive measures that are humanly possible as The New Normal. Each and every member of the society can potentially be affected and quick adjustment to this new way of life is required to be able to cope and live. We must learn from all the challenges that we faced over 2020, build on the progress so far, and be prepared for emerging challenges.

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