

COVID-19: local lessons from a global pandemic

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COVID-19 AND THE SPREAD OF INFORMATION

Coronavirus disease 2019 (COVID-19) began as a cluster of cases of viral pneumonia in Wuhan, Hubei Province, China.⁽¹⁾ It has since spread rapidly and evolved into a global pandemic, with devastating effects on healthcare systems and economies.⁽²⁾ In tandem with this, research and information on COVID-19 has also progressed rapidly. The number of COVID-19-related publications indexed in PubMed exceeded 16,000 as of 29 May 2020 and has increased exponentially with each successive month since December 2019 (Fig. 1). This has added to the body of knowledge and understanding of the disease, vulnerable populations, effective therapies and the impact on healthcare systems and beyond. Singapore aims to be a forerunner in academia and research on COVID-19.^(3,4) Efforts to this end have resulted in several epidemiological studies published in reputable journals.⁽⁵⁻⁷⁾ At the time of writing, the *Singapore Medical Journal* expedites processing of articles related to COVID-19 and articles are published online to increase accessibility to information on the pandemic.

CLINICAL PERSPECTIVES

Since it was first described, research and clinical experience have deepened our understanding of the broad manifestations of COVID-19 in patients. They may present with an entire spectrum of disease, from mild acute respiratory symptoms to severe pneumonia requiring intensive care.⁽⁸⁾ On imaging, plain film and computed tomography appearances are also highly variable.^(9,10) More recently, severe cardiovascular complications such as thrombosis, myocardial injury and myocarditis have been described.^(11,12) Off-label use of medications as therapy for COVID-19 such as hydroxychloroquine and azithromycin may also result in prolonged QT intervals and life-threatening arrhythmias.⁽¹³⁾ More work is underway to better characterise the disease manifestations and assess the effectiveness of treatments with novel and repurposed medications, humoral approaches and vaccines.

OPERATIONAL PERSPECTIVES

The pandemic has also drastically changed the way clinical practice is carried out in Singapore. For healthcare staff, strict adherence to personal protective equipment (PPE) protocols needs to be complied with and enforced across all departments. Special attention should also be accorded to the psychological impact, anxiety and stress levels that the pandemic may have caused for

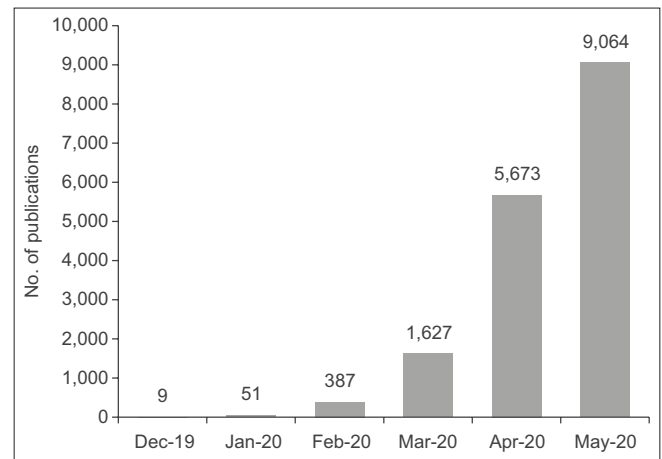


Fig. 1 Bar chart shows an exponential increase in journal publications related to coronavirus disease 2019 indexed in PubMed since December 2019.

healthcare workers.⁽¹⁴⁾ Operationally, cluster and hospital-level segregation has limited the movement of professionals across institutions. Several departments have quickly adapted to adopt videoconferencing technology to carry out virtual meetings and teaching sessions.⁽¹⁵⁾ Proceduralists may still engage in higher-risk procedures, including those that involve aerosol generation such as laparoscopy and endoscopy.⁽¹⁶⁾ Where applicable, additional measures have been undertaken, including wearing full PPE such as N95 respirators or powered air-purifying respirators.⁽¹⁷⁾ For patients, access to healthcare has not been denied, but only time-sensitive elective surgical procedures have been carried out as far as possible.⁽¹⁷⁾

SOCIETAL PERSPECTIVES

Access to information on COVID-19 has helped to accelerate research and understanding of the disease. However, counterproductively, the equally rapid spread of misinformation in the age of social media has led to undue anxiety and panic.⁽¹⁸⁾ This highlights the vital importance of having proper communication channels from the relevant authorities to the public to combat false information. Beyond the devastating health effects on those afflicted with the disease, the economic impact and detrimental psychological health burden of social distancing measures on the rest of the general public also cannot be ignored.⁽¹⁹⁾ While social distancing measures should be maintained to curb the spread of disease, effective access to psychological help should remain freely available with the aid of technology.⁽¹⁹⁾

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CONCLUSION

The exponential increase in the amount of research work on COVID-19 has led to a deeper understanding and knowledge of the disease's diverse manifestations and potential effective therapeutic options. While certain reported findings on COVID-19 are consistent and transcend national boundaries, phenotypic features and disease outcomes may vary across different locales due to differences in host response or health systems, which merits further attention. Beyond those afflicted with the disease, the pandemic also has vast implications for the overall delivery of healthcare and the well-being of healthcare workers and society as a whole, implications that will continue to unfold in the months and years ahead.

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