Editorial commentary on special issue of COVID-19 pandemic
Yang Wei

Cite this article as:

View online: https://doi.org/10.7555/JBR.34.20200701

Articles you may be interested in

Editorial commentary on special issue of Advances in EEG Signal Processing and Machine Learning for Epileptic Seizure Detection and Prediction

Human parvovirus B19–associated hematopathy in HIV disease: need for clinicopathological revisit

Postprandial hyperglycemia and postprandial hypertriglyceridemia in type 2 diabetes

Clinical features of multiple myeloma patients with isolated extramedullary relapse
Editorial commentary on special issue of COVID-19 pandemic

Wei Yang

School of Community Health Sciences, University of Nevada, Reno, NV 89557, USA.

Abstract

This special issue of The Journal of Biomedical Research presents rigorous empirical analysis related to COVID-19 research in responding to the current global COVID-19 pandemic. Selected articles from different disciplines not only offer broader perspectives on combating the outbreaks, but also disseminate the most updated findings on this new challenge for human being to the field.

Keywords: COVID-19, SARS-CoV-2, coronavirus, pandemic, outbreak

The COVID-19 pandemic is creating dramatic and daily evolving changes with profound impacts on people's lives worldwide. In responding to the current global COVID-19 pandemic, the fields of health sciences and medical care have been involved in intensive research to combat the outbreak. This special issue presents rigorous empirical analysis related to COVID-19 research, while accelerated peer-review processes were also implemented in order to disseminate updated COVID-19 studies as quickly as possible to the field.

We value that the contributions from this wide range of disciplinary approach would offer broader perspectives from different disciplines. A global challenge like the current COVID-19 pandemic can only be defeated when research results are rapidly and shared, as well as such stakeholders work together as scientists, healthcare providers, policymakers, and public health agencies. This special issue selected 7 excellent papers which represented different expertise from different COVID-19 related fields. The following paragraphs summarize the published papers.

Gorzalski et al reported "Characteristics of viral specimens collected from asymptomatic and fatal cases of COVID-19"[1]. In this paper, authors sought to determine the characteristics of viral specimens associated with fatal cases, asymptomatic cases and non-fatal symptomatic cases of COVID-19. They assessed the relative amounts of SARS-CoV-2 RNA from sample swabs by real-time PCR and use of the threshold crossing value (Ct) and compared the amount of human RNAse P found on the same swabs.

Slonim et al reported "Challenges confronting rural hospitals accentuated during COVID-19"[2]. In this paper, author discussed critical access hospitals (CAHs) in rural USA and described how current challenges to maintain sustainability of CAHs over time are accentuated by gaps in public health infrastructure and variability in individual health care plans exhibited during the COVID-19 pandemic.

Liu et al reported "Antibody responses in COVID-19 patients"[3]. In this paper, authors believe that since the beginning of 2020, the discovery of SARS-CoV-2 as the emerging virus responsible for the COVID-19 pandemic,
pandemic has provided new insight into the complexity of antibody responses to this dangerous virus. This paper aims to sort out diverse and sometimes seemingly confusing findings to put together a cohesive understanding on the profile of antibody responses elicited in COVID-19 patients.

Mehta et al reported "Medical management of COVID-19 clinic"[4]. There has been a plethora of research designs and trials in order to understand and stop the spread of the disease. Scientists and health care providers have utilized old medications and revamped them for current use, as well as creating novel therapeutics, some with promising results. In this paper, authors reviewed the major therapeutic options currently available and look into what the future still holds in order to deepen our understanding of this mysterious disease.

Pan et al reported "Identification of county-level health factors associated with COVID-19 mortality in the United States"[5]. In this paper, authors aimed to fill literature gaps on addressing disparities in health status and resources among decentralized communities in the United States, therefore helping to set up priorities on high risk communities and subpopulations in future for fighting the novel virus. Advanced modeling technique were utilized to examine complex associations of county-level health factors with COVID-19 mortality in all 3141 counties in the United States.

Zhang et al reported "Subgroup comparison of COVID-19 case and mortality with associated factors in Mississippi: findings from analysis of the first four months of public data"[6]. In this paper, authors compared subgroup differences in COVID-19 case and mortality and investigated factors associated with case and mortality rate (MR) measured at the county level in state of Mississippi, USA. The COVID-19 case rate and case fatality rate (CFR) and MR are analyzed and compared. Authors hope the findings would help to identify counties with higher COVID-19 case rate, CFR, and MR based on county demographics and the degree of its chronic conditions.

Guan et al reported "Modeling the transmission dynamics of COVID-19 epidemic: a systematic review"[7]. It is crucial for preventing the epidemic of COVID-19 to understand the early transmission dynamics and estimate the effect of control policies. In this paper, authors performed a systematic review of dynamic models in COVID-19 related studies and aimed to suggest a better solution for COVID-19 modeling.

Yun et al reported "Identification of therapeutic drugs against COVID-19 through computational investigation on drug repurposing and structural modification"[8]. Given the fact that coronavirus harnesses spike protein to invade host cells through angiotensin-converting enzyme 2 (ACE2), authors examined any previous anti-viral compounds can block spike-ACE2 interaction and inhibit the virus entry.

Chen et al reported "An unusual COVID-19 case with over four months of viral shedding in the presence of low neutralizing antibodies: a case report"[9]. Authors described an unusual COVID-19 case who had persistent viral RNA positivity for more than 4 months after initial illness in the presence of low neutralizing antibodies, but without prolonged clinical symptoms.

In conclusion, I trust that readers will find this collection of papers interesting, timely and valuable. I greatly appreciate all authors contributing to this special issue, as well as the reviewers for their invaluable comments and recommendations on the submitted papers. I am also very grateful to the editorial team for their significant support throughout the process.

References