Three Years of COVID-19 and the APJPH

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As the best-known public health journal in the Asia Pacific Region, this journal began to receive papers on COVID-19 from the onset of the epidemic early in 2020. We published our first nine papers in the May 2020 issue. To date, we have had 1152 papers on COVID-19 submitted to this journal, and we have selected 308 for publication. This is only a small proportion of the almost 300 000 papers indexed in PubMed.

We made a decision early in the epidemic that we would publish information as rapidly as could and as many quality papers that we could accommodate. We did this by asking most authors to submit their manuscripts as short communications or as letters to the editor. We are grateful to our publisher SAGE, who early in the epidemic recognized the international importance of COVID-19 and joined other major publishers in making access free of charge to COVID-19-related papers.

The articles we have published on COVID-19 have received more citations than our papers on other topics published in 2020. We are very pleased with the rate of citations for COVID-19 papers in our journal with the current citation rate at three times the usual rate for non-COVID-19 papers. The most highly cited paper was on the progress of the COVID-19 epidemic in Pakistan with 55 citations, making it 12\(^{th}\) on our list of most-cited papers in the history of the journal.\(^1\) The COVID-19 publications have come from more than 30 different countries. In the top 20 papers, by citations, 14 countries are represented. This shows the breadth of academic endeavor within the countries represented by Asia Pacific Academic Consortium for Public Health (APACPH).

To date (September 1, 2022), the World Health Organization (WHO) has reported 608 million cases and 6.8 million deaths. Both figures are likely to be under-reported and the number of infections is likely to be far higher, perhaps in the order of 2 billion. In the Western Pacific Region of WHO, 84 million confirmed cases have been reported and another 60 million in Southeast Asia. The WHO reports that more than 12 billion vaccine doses have been administered, but this is likely an overestimate of the number actually given because of field wastage. Different types of vaccines may also vary in effectiveness and with new strains emerging, re-infection is common. The development of COVID-19 vaccines, their testing to the most rigorous standards, their manufacture in quantity, and distribution has been the greatest achievement of scientific medicine and public health. While COVID-19 has been the greatest epidemic for a century, the use of vaccines significantly lowered morbidity and mortality and the risk of severe disease and death. However, they were less effective in limiting transmission and in preventing infection, and overcoming this limitation should be a priority for continuing research.

COVID-19 has shown itself to be a disease of many colors. The severity spectrum has ranged from very mild flu-like symptoms illness to respiratory failure and rapid death. The duration has ranged from a very short illness, 24 hour, to the long-COVID-19 syndromes that last for many months. Similarly, the range of symptoms has been broad and while cases are most infectious in the first few days, in some cases, the live virus can be spread 14 days after initial infection. The variability of infection and infectivity, is in part due to viral variants which emerge as evolution of the virus continues.

Before the pandemic, in northern Asia, wearing face-masks was a common practice, especially during winter epidemics of respiratory diseases. The importance of personal protection, including mask wearing has been demonstrated in many studies, including in Japan, Korea and Singapore.\(^2,3\) In the Republic of Korea, the population is used to wearing masks to counter the clouds of “yellow dust” that sometimes envelop the country and to prevent infection. Mask wearing practices were legislated and strongly encouraged during the pandemic in many APACPH member countries.\(^4,5\)

As one writer in our journal described it, “The socio-culturally accepted practice of wearing face masks as personal and public hygiene in East Asia may have reduced the spread of infection.” This mask wearing culture was likely rooted in East Asia’s cultural mores of social responsibility in personal/public hygiene and also shaped by East Asia’s relatively recent experience with major disease outbreaks such as the Middle East respiratory syndrome and SARS-CoV.\(^6\) The reasons why Asians took readily to wearing

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masks are diverse, but they do wear them. On the contrary, many Western societies had widespread protests against mask wearing, despite that fact that wearing them was saving lives. Korea, Japan, and Singapore had overall death rates and case fatality rates from the COVID-19 epidemic that were only a small fraction (10% or less) of the rates of similar sized countries such as the United States and the United Kingdom. The wearing of masks is one factor that contributed to this remarkable effort. In contrast to the northern Asian countries and Singapore, Indonesia had a high rate of COVID-19 infection and deaths and a low rate of mask wearing.

We analyzed the major topics covered in 500 consecutive submissions on COVID-19 received by the Asia Pacific Journal of Public Health (APJPH) in 2021. Due to space limitations, only approximately one-quarter were published. We classified 36% of submissions as general public health topics, including epidemiology, prevention strategies, and modeling. Mental health issues were 20% of submissions, including people who have been affected by the virus, those who are worried about catching the virus, those who have been affected by preventive measures such as lockdowns, and of course the large number of health workers who are stressed by the heavy workload and the varying outcomes of their caring.

Almost one half of papers on mental health issues relating to COVID-19 described the issues faced by health workers at all levels. It is obvious that “burn out” due to overwork, concern over their own health and about the effectiveness of their treatments, and lack of supplies took a large toll on our health care professionals. In the future, we need to discuss ways of improving resilience education in the curricula to attempt to mitigate these issues. Closely related to this topic were the 13 papers we received on the physical and social consequences of widespread and sometimes lengthy “lockdowns.” For families isolating at home, there was uncertainty of the duration, and the availability of basic supplies were of great concerns. Food supplies became restricted and were often not nutritious or culturally acceptable. Humans are social creatures, and the lack of interaction led to psychological distress. Several papers described online programs to deal with the lack of social interaction for children away from schooling and adults. There have been no studies yet presented on the long-term outcome of these programs.

Papers on vaccination were 10% of the total, mainly studies quantifying the reasons for vaccine rejection and associated factors. These attitudes are very difficult for public health workers to accept—How people would reject a safe and effective means of saving their lives is something we find difficult to understand. Health workers need to learn to understand these doubts and educate to overcome their fears. What was more difficult to understand and impossible to accept were several papers from health professionals condemning the vaccines without any scientific basis. These beliefs have no place in modern public health and medicine.

As editors, we can understand how public health workers would want to communicate their concerns through publication. However, we cannot accept methodology that does not allow accurate conclusions to be reached. We have had many papers based on online surveys, which even when well done are problematic. In online studies, there is always uncertainty about who is the target population, what is the response rate, and how quality control could be managed. Most of the small online surveys measuring knowledge or psychological stress and so on are not suitable for publication. We have had several papers submitted advocating different treatments for COVID-19, based on observational studies, including case-control studies. Of course, any proposed treatment needs to be tested in a randomized controlled trial that follows strict ethical principles as shown by the review of useless drugs.

In the submission and in published articles, we have highlighted other important results of the epidemic. Child vaccinations have often been neglected due to lack of staff, difficulty in obtaining supplies, and travel restrictions. Almost 40% of countries have reported to WHO that vaccination programs have been severely disrupted by the COVID-19 epidemic. This requires urgent public health action as it will require considerable efforts to avert future epidemics of preventable childhood diseases.

Chronic disease management is often neglected or ineffective in lower income countries (LICs) and has suffered further setbacks during the pandemic. We have previously described the food shortages brought on by the epidemic and the war in the Ukraine, and these remain a global public health concern. The United Nations reports that the world food situation has deteriorated substantially. It is estimated that the population experiencing hunger in 2021 rose to as many as 828 million. Severe food insecurity is now more prevalent reaching 11.7% of the world population. The number of people unable to afford a diet optimum for health rose by 112 million to almost 3.1 billion, which will predispose to increasing chronic disease. For those who have been living in lockdown, supplies have often lacked the fresh food needed for a healthy diet.

A recent study has documented the large number of children who have been orphaned during the pandemic. A study by Hillis has estimated that 7 500 000 children experienced COVID-19–associated orphanhood up to May 2022. The worse affected regions were Africa and Southeast Asia.

The APJPH has worked hard to communicate accurate information about the public health experience in our region during the COVID-19 pandemic. We appreciate the hard work of our staff in Kuala Lumpur and at publishers, SAGE, during this period. But while public health workers have been striving to communicate strategies that can promote good health to all people, others have shown how easy it is to use modern communications to spread misinformation. There is a need to boost health promotion efforts to increase health literacy and enable our people to understand what is the best science available.
In this review of the journal’s efforts, we have emphasized the many facets of the COVID-19 epidemic. We look forward to future submissions to evaluate progress in controlling the pandemic and to document emerging problems such as long COVID-19 and psychological sequelae.

Regardless of how many more waves of the COVID-19 pandemic will hit our community, the aftermaths of this pandemic will be with us for a long time. The public health system will be left to manage many staff who are suffering from lingering psychological damage, burnout from overwork, and the long-term effects of COVID-19. Many who have suffered from COVID-19 and other viral infections such as dengue are left with long-term symptoms, with lethargy being the most common complaint. There are as yet no tests for “long-COVID-19” and no treatment, but psychological support is required. Estimates of the prevalence of long-COVID-19 range from 5% to 30%, which will be a massive drain on health resources. It appears that those who suffered more severe disease or who already have a chronic problem such as diabetes retain symptoms for longer. We hope that our public health readers will respond with research programs to document this problem.

The pandemic and the Russian War have combined to have a severe economic impact. The Global Development index has now declined for two years in a row, undoing all of the gains that have been achieved in the past five years. This will restrict the funds available for health, nutrition, food aid, and other important development programs. One positive result of the pandemic is the demonstration that it is possible to develop, test, and manufacture new vaccines very rapidly.

This journal has sought to serve Asia Pacific public health workers by publishing as many papers as we can. We hope that many of our readers will continue to undertake research and evaluate programs and submit their papers to our journal. We will remain a good source of information on the progress of the epidemic.

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References
1. Abid K, Bari YA, Younas M, Javaid ST, Imran A. Progress of COVID-19 epidemic in Pakistan. Asia Pac J Public Health. 2020;32(4):154-156.
2. Shimizu S, Ishimaru T, Nagata M, et al. Effectiveness of infection preventive behaviors on COVID-19-like illness symptoms during the winter third wave of the epidemic in Japan: a 2-month follow-up nationwide cohort study. Asia Pac J Public Health. 2020;32(2):191-198.
3. Yu S, Kim S, Kang J. Face mask policies in South Korea in response to COVID-19. Asia Pac J Public Health. 2020;32(8):497-499.
4. Park S, Kim B, Lee J. Social distancing and outdoor physical activity during the COVID-19 outbreak in South Korea: implications for physical distancing strategies. Asia Pac J Public Health. 2020;32(6-7):360-362.
5. Song YE, Ko LD, Jang SH. The South Korean government’s response to combat COVID-19 misinformation: analysis of “Fact and Issue Check” on the Korea Centers for Disease Control and Prevention Website. Asia Pac J Public Health. 2021;33(5):620-622.
6. Wang SSY. Journey to the east: COVID-19 lessons from the east. Asia Pac J Public Health. 2020;32(8):513-514.
7. Fearnley L, Wu X. Beyond Asian “mask culture”: understanding the ethics of face masks during the COVID-19 pandemic in Singapore [published online ahead of print September 06, 2022]. Crit Public Health. doi:10.1080/09581596.2022.2114315.
8. Miftahussurur M, Savitri C, Waskito L, et al. Lessons from Indonesia, a country with highest COVID-19 mortality rate in the world: dissecting multiple aspects. F1000Res. 2022:11:920.
9. Bramante CT, Huling JD, Tignanelli CJ, et al. Randomized trial of metformin, ivermectin, and fluvoxamine for COVID-19. N Engl J Med. 2022;387(7):599-610.
10. Larson A, Skolnik A, Bhatti A, Mitrovich R. Addressing an urgent global public health need: strategies to recover routine vaccination during the COVID-19 pandemic. Hum Vaccin Immunother. 2022;18(1):1975453.
11. Formenti B, Gregori N, Crosato V, Marchese V, Tomasoni LR, Castelli F. The impact of COVID-19 on communicable and non-communicable diseases in Africa: a narrative review. Infez Med. 2022;30(1):30-40.
12. Binns C, Low WY. Peace, war, and public health. Asia Pac J Public Health. 2022;34(5):481-482.
13. FAO, IFAD, UNICEF, WFP, and WHO. The State of Food Security and Nutrition in the World 2022: Repurposing Food and Agricultural Policies to Make Healthy Diets More Affordable. Rome: Food and Agricultural Organization of the United Nations; 2022.
14. Hillis S, N’Konzi JN, Msemburi W, et al. Orphanhood and caregiver loss among children based on new global excess COVID-19 death estimates [published online ahead of print September 06, 2022]. JAMA Pediatr. doi:10.1001/jamapediatrics.2022.3157.
15. Larson HJ, Gakidou E, Murray CJL. The vaccine-hesitant moment. N Engl J Med. 2022;387(1):58-65.
16. United Nations Development Programme. Human Development Report 2021/2022. New York, NY: United Nations; 2022.