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Editorial: Does healthcare financing explain different healthcare system performances and responses to COVID-19?

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Editorial on the Research Topic

[Does healthcare financing explain different healthcare system performances and responses to COVID-19?](#)

The scale and impact of the COVID-19 pandemic are globally evident and present an unprecedented challenge to public health, causing devastating social and economic disruption as reported by the World Health Organization. There have been major differences in the responses and performance of national healthcare systems to the pandemic, and there is a need to thoroughly explore the roots of these variations.

The financing model is a distinguishing feature of any healthcare system. Despite the strong criticism of the out-of-pocket payment model that is common in Low-to-Middle Income Countries [LMICs; (1)], the performance of other models of healthcare systems in managing the pandemic is not necessarily superior (2). Surprisingly, recent attempts to examine the technical efficiency of healthcare systems suggest that a number of LMICs are outperforming those in developed economies (3).

The current pandemic represents a unique opportunity to explore whether the variation in the performance of healthcare systems to the pandemic is due to the healthcare financing model, or whether other factors have a greater influence on performance (4). Such an understanding is important in learning how to rethink the suitability of healthcare systems.

Yang et al. use a methodological framework, applying the two-agent game analysis. Their findings show that regional cooperation in facing the epidemic maximizes the regional benefits brought by containing the epidemic and improving economic performance. Yet, despite the differences in economic scale and epidemic prevention and control preferences between countries, not all of them directly benefitted from cooperation. Accordingly, the cooperative incentive of each country has to be strengthened through the allocation of cooperative income.

The second contribution entitled “The DEMATEL method explores the interdependent relationship structure and weights for diagnosis-related groups system” examines the overall performance of medical services. It indicates that patients and managers should first focus on the capacity of medical service providers when making a choice or deciding how to use the results of the DRGs system (Zou et al.).

Li et al. collected data from 3,098 A-share companies in 2019 and 2020. They applied the Z-score model to reasonably evaluate enterprise financial risk, and analyzed the impact of Research and Development (R&D) investment on enterprise financial risk under COVID-19. Their findings have revealed that the pandemic has increased the number of high-risk enterprises. R&D investment appears to be able to effectively reduce an enterprise’s financial risk, and enterprises that attach importance to scientific research are relatively less affected by COVID-19. Compared with non-state-owned enterprises, R&D investment under state-owned enterprises can better help enterprises reduce financial risk. When the enterprise’s financial risk is lower, the role of R&D investment in reducing financial risk is more significant.

An intriguing study came discusses Romania in eastern Europe, presenting a post-Semashko health system model. These authors tested working hypotheses using an econometric linear regression model based on the financing budgetary function, which matches funding to the specific need for each expenditure heading. The authors concluded that under the impact of pandemic stress, measures to improve healthcare management, increase performance and streamline financial allocation are vulnerable and cannot counteract the effects that the pandemic has on the healthcare of the population as reflected by the morbidity and mortality indicators collected during the pandemic (Antohti et al.).

Emerging BRICS (Brazil, Russia, India, China, and South Africa) countries, marked by long-term bold real GDP growth (5), are the strongest global drivers of supply and demand for medical goods, generic pharmaceuticals, and services outside wealthy OECD nations. The lockdowns triggered by the pandemic have strongly impacted airborne, naval, and land trade routes and ground supply chains among the major

nations (6). The Global South’s LMICs countries, many of which are represented in this Research Topic, present a huge diversity in terms of the historical legacy of their medical care financing and provision patterns (7). An array of clinical post-COVID-19 syndromes have worsened the burden of premature mortality and absenteeism attributable to chronic non-communicable diseases (8). The Global South’s health systems face difficult sustainability issues, driven by these underlying patterns (9, 10). Their health system inefficiencies are becoming increasingly extended to the limits of resilience (5). Recent seminal evidence has documented that most of the supplies necessary for addressing COVID-19 and intensive care originate from China and other South-East Asian (ASEAN) nations (11).

The goal of this Research Topic was to explore the impact of financing on the readiness of different healthcare systems to respond to emergencies (12). Health policy considerations were primarily focused on financing mechanisms and healthcare system response (13). The editors believe that these heterogeneous contributions have opened new debates. The challenges faced during the COVID-19 pandemic, are here approached through the lens of several distinctively different world regions, including the Global South (9). We hope that this article Research Topic inspires scientific efforts in future epidemiology and public health developments.

Author contributions

MJ prepared the manuscript draft. SM, SA, and DH revised the manuscript for important intellectual content. All authors fulfill ICMJE conditions for full authorship. All authors contributed to the article and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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