The need for voices from the grassroots in China's public health system

Xingzuo Zhou,[a,*] Yiang Li,[b] Ana Correa,[a] Francesco Salustri,[a,c] and Jolene Skordis[a]

[a]Institute for Global Health, University College London, UK
[b]Department of Sociology, University of Chicago, USA
[c]Department of Economics, Roma Tre University, Italy

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During the COVID-19 pandemic, China adopted a zero-COVID policy to minimise infections. This entailed allocating resources to lockdown implementation and enforcement, and city-wide PCR testing. At the same time, however, the primary healthcare system was not sufficiently improved, and the local healthcare providers were not supported enough to deliver service to the population.[1] The National Health Commission (NHC) of the People's Republic of China (PRC) announced that, from 8th January 2023, all regular reverse transcription polymerase chain reaction (PCR) tests, quarantine rules, and the zero-COVID policy were abandoned. This rapid change in policy caused immediate disruption in the three-tier public healthcare system: tertiary and secondary level hospitals were overwhelmed with patients seeking care, COVID-19 infection numbers and excess deaths rose steeply, basic medicines and hospital beds were in short supply and the health system was placed under significant strain nationally.[2]

Low levels of investment in primary care and the post-pandemic disruption of tertiary care poses significant risks to the health of China's rapidly ageing population. China has the largest and fastest ageing population in the world, with 164 million people aged over 65 years old, accounting for 13.5% of the national population.[3] Current projections show that China's old-age dependency ratio will more than double in 30 years, with 37.2 over-65s per 100 working age people in 2050.[4] Population ageing leads to an increasing prevalence of non-communicable diseases (NCDs), which contributed to 94.8% of all-cause mortality in China before the pandemic.[5] After the sudden reduction of control measures without suitable preparation of the primary health care system, this ageing population may become at risk of severe healthcare issues that can be further affected by COVID-19. Not only are they at higher risk of developing severe COVID-19 or suffering more from comorbidities, given their age and existing NCDs,[6] but also face reduced access to primary health care, with many already having to rely on informal care from their families.[7,8] China's older population are also at increased risk due to low COVID vaccination levels in the country, with the receipt of booster doses particularly low compared with other settings. By the end of 2022, only 56.9% of the Chinese population had received booster doses, with even lower rates among the over-65 population.[2,9] It is significantly lower than other countries, such as UK which has 70.2% booster vaccination rate. Given the low booster vaccination rate and the rapid lifting of the zero-Covid policies without adequate preparation, infections rose rapidly.[10]

Over the last two decades, the Chinese central government has undergone a series of reforms to its healthcare systems at different levels. In 2003, the "deepening health reform" aimed to build high-quality and value-based service delivery and the "Healthy China 2030" reform sets out plans to achieve universal health coverage (UHC) by co-building and sharing health for all. Currently, China follows a four-tier (NHC, provincial, city and county level) administration system and three-tier (Tertiary, secondary and primary level hospitals) delivery system. The township level, a lower tier than the county level, mainly manages primary-level hospitals and community health centres. However, health workers and practitioners at this level, the "grassroots", lack involvement in the health policy-making process. Most of the healthcare policies are set at the highest administrative tier.[11] During the COVID-19 pandemic, the NHC of the PRC was responsible for setting health policies. Since primary health care does not have sufficient administrative and decision-making power and the perspectives of doctors and practitioners at lower tiers are not effectively communicated to central policymakers, some policies were made based on biased and politics-driven observations and may be not suitable for all communities given different population needs. This may be a key reason for low levels of effective primary healthcare delivery during the pandemic[12] and should be considered as a key target for efficient post-pandemic health service recovery.

An additional characteristic of the Chinese health system that might threaten efficient post pandemic systems recovery, is the Fee-For-Service (FFS) payment mechanism in use at the secondary healthcare. Fee-For-Service (FFS) payment allows healthcare providers to charge separately for each service they perform. Under this system, healthcare providers are incentivised to direct patients to more diagnostic tests and specialty care,

*Corresponding author.
E-mail address: xingzuo.zhou.19@ucl.ac.uk (X. Zhou).
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which result in higher reimbursements. This means that patients often bypass primary care facilities in favour of secondary care, resulting in an inflated demand for secondary health care that does not necessarily reflect clinical need.[13] This may have contributed to an unbalanced healthcare resource allocation: 82% of the health resources were devoted to either secondary or tertiary hospitals, rather than primary care facilities.[14] Even more resources were recently allocated to secondary and tertiary care when the health authorities were overwhelmed by rapidly increasing demand after the lifting of the zero-COVID policy. While the inadequate preparation and constraints in health production capacity in the short term caused a shortage of medicine across the whole healthcare sector, this was further exacerbated in primary care due to the substantial imbalance in resource allocation in China. This resulted in the ageing population with NCDs being further affected due to the depletion of basic medical resources.[15,16] Post pandemic recovery in the care system will almost certainly require a reallocation of resources towards primary care, with the possibility of ring-fenced funding for NCDs to prevent future fungibility.

The disruption of China's care systems during and immediately post-pandemic is not unique in the global context. Most countries continue to experience significant health systems challenges. However, the size of China's population and its ageing demographic, makes it a particular health system challenge from which important global lessons might be learned. China's case evidences the consequences of lack of integration of primary care practitioners into high-level decision-making, and the lack of investment in primary healthcare. The government must allow for transparent and meaningful integration of evidence and knowledge from researchers, healthcare providers, and practitioners at different tiers in the healthcare system when designing policies. In this way, the government can better allocate scarce medical resources for testing, medical treatment, and vaccination such that the healthcare system's capacity to face the healthcare challenges of COVID-19 and future pandemics can be improved. Payment systems should encourage the use of cost-effective primary care and primary care funds must be protected from the risk of reallocation into secondary and tertiary care – even in times of crisis. There is an urgent need for the Chinese government to rethink the payment mechanism and the allocation of medical resources, thus avoiding overcrowding at tertiary hospitals, enhancing primary healthcare capacity, and utilising the perspectives of grassroots-level health workers and researchers who better understand the needs of the population. Specifically, similar to the establishment of China CDC Weekly journal which focused on academia, we also recommend the establishment of a platform for all grassroots-level health workers and researchers to discuss and share their perspectives. A similar online health platform, using community moderators, has proved successful in enhancing communication and perspective-sharing amongst practitioners in the UK.[17] In China, the central administration could hear the voices of grassroots healthcare workers directly through such a platform and utilise their views to design and shape healthcare reforms.

Contributors

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Declaration of interests

No conflict of interest.

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