the intervention, a careful interpretation of the negative findings is needed. Drug development and clinical evaluation of more potent and specific latency reversal agents alone and in combination in people living with HIV receiving ART and finding new approaches to put the kill into the kick and kill regimen are still warranted to determine if this strategy might allow people living with HIV to safely stop ART and achieve a cure.

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*Sharon R Lewin, Thomas A Rasmussen
sharon.lewin@unimelb.edu.au

The Peter Doherty Institute for Infection and Immunity, The University of Melbourne and Royal Melbourne Hospital, Melbourne, VIC 3000, Australia (SRL, TAR), and Department of Infectious Diseases, Alfred Hospital and Monash University, Melbourne, Australia (SRL).


COVID-19: the gendered impacts of the outbreak

Policies and public health efforts have not addressed the gendered impacts of disease outbreaks.1 The response to coronavirus disease 2019 (COVID-19) appears no different. We are not aware of any gender analysis of the outbreak by global health institutions or governments in affected countries or in preparedness phases. Recognising the extent to which disease outbreaks affect women and men differently is a fundamental step to understanding the primary and secondary effects of a health emergency on different individuals and communities, and for creating effective, equitable policies and interventions.

Although sex-disaggregated data for COVID-19 show equal numbers of cases between men and women so far, there seem to be sex differences in mortality and vulnerability to the disease.2 Emerging evidence suggests that more men than women are dying, potentially due to sex-based immunological3 or gendered differences, such as patterns and prevalence of smoking.4 However, current sex-disaggregated data are incomplete, cautioning against early assumptions. Simultaneously, data from the State Council Information Office in China suggest that more than 90% of health-care workers in Hubei province are women, emphasising the gendered nature of the health workforce and the risk that predominantly female health workers incur.5

The closure of schools to control COVID-19 transmission in China, Hong Kong, Italy, South Korea, and beyond might have a differential effect on women, who provide most of the informal care within families, with the consequence of limiting their work and economic opportunities. Travel restrictions cause

![Image of two women in medical attire]
If the response to disease outbreaks such as COVID-19 is to be effective and not reproduce or perpetuate gender and health inequities, it is important that gender norms, roles, and relations that influence women’s and men’s differential vulnerability to infection, exposure to pathogens, and treatment received, as well as how these may differ among different groups of women and men, are considered and addressed. We call on governments and global health institutions to consider the sex and gender effects of the COVID-19 outbreak, both direct and indirect, and conduct an analysis of the gendered impacts of the multiple outbreaks, incorporating the voices of women on the front line of the response to COVID-19 and of those most affected by the disease within preparedness and response policies or practices going forward.

We declare no competing interests.

*Clare Wenham, Julia Smith, Rosemary Morgan, on behalf of the Gender and COVID-19 Working Group†

c.wenham@lse.ac.uk

Department of Health Policy, London School of Economics and Political Science, London WC2A 2AE, UK (CW); Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada (JS); and Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA (RM)

†Members of the Gender and COVID-19 Working Group include Ahmed Al-Rawi, Simon Fraser University, Canada; Tamaryn Crankshaw, HEARD, South Africa; Sara Davies, Griffith University, Australia; Huixun Feng, Griffith University, Australia; Karen A Grépin, University of Hong Kong, Hong Kong; Sophie Harman, Queen Mary’s University of London, UK; Nuzulul Kusuma Putri, Universitas Airlangga, Indonesia; Kelley Lee, Simon Fraser University, Canada; Gustavo Matta, Oswaldo Cruz Foundation (Fiocruz), Brazil; Denise Pimenta, Fiocruz, Brazil; Nana Foku, HEARD, South Africa; and further members of the Gender and COVID-19 Working Group.


As of March 5, 2020, there has been sustained local transmission of coronavirus disease 2019 (COVID-19) in Hong Kong, Singapore, and Japan. Containment strategies seem to have prevented smaller transmission chains from amplifying into widespread community transmission. The health systems in these locations have generally been able to adapt, but their resilience could be affected if the COVID-19 epidemic continues for many more months and increasing numbers of people require services. We outline some of the core dimensions of these resilient health systems and their responses to the COVID-19 epidemic.

First, after variable periods of adaptation, the three locations took actions to manage the outbreak of a new pathogen. Surveillance systems were readjusted to identify potential cases while public health staff identified their contacts. National laboratory networks developed diagnostic tests once the COVID-19 genetic sequences were published and laboratory testing capacity was increased in all three locations, although expansion of the diagnostic capacity to university and large private laboratories in Japan is still ongoing. In Hong Kong, initially, only pneumonia patients without a microbiological diagnosis were tested, but surveillance has been broadened to include all inpatients with pneumonia and a purposively sampled proportion of outpatients and emergency attendees totalling about 1500 per day (Leung GM, unpublished). Japan’s testing strategy has also evolved with diagnostic tests now offered to all suspected cases irrespective of their travel history; however, there are reports of cases that should have been tested but were not.

Different strategies were used to selectively control travellers entering these locations. In Singapore, there was a stepwise series of decisions to restrict entry for anyone from mainland China and, more recently, from northern Italy, Iran, and South Korea. Hong Kong has imposed mandatory 14-day quarantine for everyone who enters from the mainland, and denies entry to non-local visitors from South Korea and Iran as well as the most affected parts of Italy. In Japan, there were travel restrictions on citizens from Hubei and Zhejiang provinces, and cruise ships with cases of COVID-19 were quarantined.

Second, intragovernmental coordination was improved because health authorities drew on their experiences of severe acute respiratory syndrome during 2002-03 in Hong Kong and Singapore, H5N1 avian influenza in 1997 in Hong Kong, and the 2009 influenza H1N1 pandemic in all three locations. Hong Kong and Singapore began interministerial coordination within the first week, whereas Japan did this in early February when the operation to quarantine passengers on the Diamond Princess cruise ship was heavily criticised as inadequate, resulting in the widespread infections among crew and passengers.

Third, all locations adapted financing measures so that all direct costs for treating patients are borne by...