



Challenges to HIV Care and Psychological Health During the COVID-19 Pandemic Among People Living with HIV in China

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Published online: 7 May 2020

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The pandemic of coronavirus disease 2019 (COVID-19) has led to unprecedented disruption in people's lives and health-care across the globe. In China, where the COVID-19 outbreak was first identified, people living with HIV (PLWH) have experienced critical challenges and barriers to optimal care outcomes. It may be important to note that prior to the COVID-19 outbreak, PLWH in China were already affected by high levels of HIV stigma [1], psychological distress (depression, anxiety) [2–4], and suboptimal adherence [5, 6]. For instance, in two most recent large sample survey studies (conducted in 2013–2015) among PLWH in China, 32.9–38.4% PLWH reported depressive symptoms and 27.4% experienced anxiety symptoms [7, 8]. Among patients who regularly attend clinical care, a meta-analysis found 77.6% PLWH had adequate adherence [9], though this is likely an overestimate of actual adherence in the population due to sample selection and report bias. In a recent report of a northeastern clinic in China that synthesized patients' data in the past ten years, only 15% of PLWH achieved viral suppression [6]. The COVID-19 outbreak further intensifies existing challenges while highlighting structural barriers. This note is informed by authors' observations and clinical experience in HIV care in China as well as preliminary findings from a recent survey we conducted among PLWH in China (in February and March 2020, full report in writing).

Herein, we describe two significant challenges during the COVID-19 outbreak experienced by PLWH in the China context, including (1) linkage to care and access to medication, and (2) psychosocial consequences including stigma and mental health issues.

Linkage to Care and Access to Medication

Due to the city-level centralized management of infectious diseases in China (e.g., PLWH are often assigned to certain hospitals designated for HIV care), strict quarantine enforcement and transportation lockdown in many regions across China beginning in late January 2020 may have caused massive disruption in HIV care. Due to the growing number of COVID-19 cases and the shortage of medical resources, departments of infectious diseases in many hospitals in China were designated for COVID-19 and suspended on taking new patients with HIV/AIDS and other infectious diseases. With the dual epidemics (COVID-19 and HIV) and increased burden on the health system, it was extremely difficult for PLWH with severe opportunistic infections or other comorbidities to seek medical help, especially when hospital admissions were needed. For PLWH in care, maintaining HIV treatment and achieving viral suppression were also challenging during the COVID-19 outbreak. For instance, the Wuhan LGBTQ Center received calls from more than 2,000 people living with HIV (largely sexual minority men) in Wuhan city during February 2020 seeking help to resolve issues in insufficient medication and care disruption. In February and March 2020, we conducted a survey with PLWH from 25 provinces in China ($N=703$) to capture HIV care and mental health challenges experienced by patients. Preliminary analysis showed that 22.8% reported that their medication uptake had been disrupted, and 67.5% reported worrying about disruption in their medication and future clinical care.

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Psychosocial Consequences of COVID-19

To address concerns related to medication disruption, hospitals and HIV clinics in China have developed protocols to mail antiretroviral drugs to PLWH in care. However, mailing has resulted in significant challenges related to unwanted exposure of one's HIV status as well as potentially other stigmatized identities (e.g., sexuality) to other household members. This risk was heightened as the quarantine measures took place during the Spring Festival (i.e., Chinese lunar new year), the most important holiday in China in which people travel to their hometowns to gather with family members. PLWH who concealed their HIV status due to fear of stigma and discrimination face the threat of unwanted exposure of their HIV status to family members due to mailing of medicine and interpersonal proximity during this time. Anecdotal records show that some PLWH chose to discontinue their medicine during quarantine due to the need to conceal their HIV status from parents. In addition to individual- and family-level stigma, the spread of unfounded conspiracy theories—e.g., local claims that COVID-19 was engineered by human effort through inserting HIV to a coronavirus—has led to heightened societal stigma and fear of HIV. Medication uptake and HIV care disruption, risk of status exposure, and heightened HIV stigma, may have contributed to worsened mental health among PLWH during the COVID-19 outbreak. In our survey with 703 PLWH in China (data collected in February–March 2020), 60.8% reported depression, 49.8% noted anxiety symptoms, and 38.5% reported recent insomnia. These psychosocial issues may further create a syndemic condition exacerbating adverse health outcomes among PLWH [10], including suboptimal medication adherence, failure to achieve viral suppression, and HIV transmission risk.

Conclusion and Implications

Lessons from China may inform HIV care for PLWH globally during the COVID-19 pandemic. The current note attends to Chinese PLWH, yet attention is also needed for key populations at risk for HIV (e.g., men who have sex with men, commercial sex workers) in terms of HIV prevention, testing, and linkage to care. Informed by current knowledge on salient challenges in HIV care among PLWH in China, follow-up research with PLWH and populations affected by HIV are needed to learn key lessons and further identify the scale of impact by COVID-19. China's massive and strict quarantine efforts have achieved much success to contain the COVID-19 outbreak. However, to sufficiently address the dual epidemics of COVID-19 and HIV, the healthcare system in China may need to adopt more flexibility, allocate

resources successfully, and develop effective strategies to reach vulnerable populations such as communities affected by HIV during another infectious disease epidemic. This may also be an opportunity to engage and educate the public as well as PLWH in reducing HIV stigma and improving coping and mental health issues related to COVID-19 and HIV.

Acknowledgements Work by the first author was supported by the National Institute of Mental Health (T32MH078788) and affiliated by the Providence/Boston Center for AIDS Research (P30AI042853).

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