The Spectrum of Engagement in HIV Care: How Is It in Shandong Province, China?

TO THE EDITOR—We read with interest the recent article by Gardner et al [1]. The authors shed light on a powerful method to evaluate the state of human immunodeficiency virus (HIV) care and better understand the meaning of care and attrition in the continuum of HIV care.

It is illuminating for us. Antiretroviral therapy (ART) has been proved to be an effective strategy to prevent HIV transmission, while successful ART depends on optimal HIV care. With the second-largest population and gross domestic product in China, Shandong province has implemented “Four Frees and One Care” and “Five Expands and Six Strengths” AIDS policy, including free HIV antibody testing and ART. However, the AIDS epidemic continues to increase and is severe in some areas and subpopulations (eg, men who have sex with men). How is the HIV care in Shandong province? What is the disparity between Shandong and the United States?

Based on the surveillance data of Shandong, we defined 7 steps to describe HIV care and answer these questions. It is estimated by the workbook method recommended by the United Nations Joint Programme on HIV/AIDS that there are about 6500 persons living with HIV in 2013. Of these cases, 60.1% were diagnosed, 82.9% of whom were linked to care (defined as documentation of 1 or more CD4 or viral load test results after the date of diagnosis within 180 days). Among the cases linked to care, 81.4% were retained (defined as documentation of 2 or more CD4 or viral load test results separated by >90 days within 12 months prior to the date of censoring). Of the remaining cases, 67.4% require ART (defined as a CD4 count <350 cells/μL or the presence of a World Health Organization–designated clinical stage 3 or 4 AIDS-defining illness), 92.2% of whom receive it (defined as documentation of 1 or more prescription refills within 12 months prior to the date of censoring), and 59.6% of treated persons have an undetectable viral load (defined as <50 copies/mL). It is estimated that 15.0% of HIV-infected individuals in Shandong have undetectable viral load. Compared with HIV care in the United States [1, 2], the percentages of linkage, retention, and prescribed ART were higher, but percentages of diagnosis, requirement for ART, and undetectable viral load of treated persons or all persons with HIV infection were lower.

Further analysis also shows that, different from that in the United States [2], the differences in the continuum of care among subpopulations by sex and transmission category were statistically significant. Except for linkage to care, the percentage of females in other steps of the spectrum is higher than that for males. Persons who were infected via homosexual contact are less likely to achieve undetectable viral load.

In conclusion, the results suggest that the spectrum of HIV care in Shandong has its own characteristics. With >90% of the ART coverage of the HIV-infected persons who need ART, and only 15% of undetectable viral load of all HIV-infected persons, it is necessary to find the cause of attrition in the continuum of HIV care, especially in diagnosis, requirement for ART, and undetectable viral load by subpopulations. Effective measurements should be taken to improve HIV care to improve ART, so as to reduce morbidity, mortality, and HIV transmission.

Note

Potential conflicts of interest. All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Na Zhang,1,2,a Dianmin Kang,2,a Guoyong Wang,2 Xiaorun Tao,2 Xingguang Yang,2 and Ning Wang1
1National Center for AIDS/STD Control and Prevention, Chinese Center for Disease Control and Prevention, Beijing, and 2Institute for AIDS/STD Control and Prevention, Shandong Center for Disease Control and Prevention, Jinan, China

References

© The Author 2015. Published by Oxford University Press on behalf of the Infectious Diseases Society of America. All rights reserved. For Permissions, please e-mail: journals.permissions@oup.com.

DOI: 10.1093/cid/civ015