Author's response to reviews

Title: Prevalence of human immunodeficiency virus 1 infection in the last decade among cross-border travelers who entered major land ports in the Yunnan Province, China

Authors:

Binghui Wang (binghuiwang@aliyun.com)
Yaobo Liang (ynkmlyb@163.com)
Yue Feng (fyky2005@163.com)
Yaping Li (lypciq@126.com)
Yajuan Wang (yajuanwang1990@163.com)
A-Mei Zhang (zam1980@yeah.net)
Zulqarnain Baloch (znbalooch@yahoo.com)
Li Liu (liuli2272@163.com)
Weihong Qin (qinwh19@sina.com)
Xueshan Xia (oliverxia2000@aliyun.com)

Version: 4 Date: 11 December 2014

Author's response to reviews: see over
November 19th, 2014

Dear Editor of BMC Public Health:

I request that the attached manuscript, entitled as "Prevalence of the HIV-1 in the last decade among cross-border travelers who entered major land ports in the Yunnan Province, China", was considered for publication in your journal. This manuscript has not been submitted to any other journals. All authors have agreed to this submission and are responsible for its contents. And all authors have agreed that the corresponding author can act on their behalf regarding any subsequent processing of the paper.

Although its infection rates and mortality rates are declining, HIV infection is still considered as one of the most serious health threats around the world. And, Southeast Asia was once considered the center of HIV epidemic worldwide with approximate 3.5 million HIV-1 infected populations living in this area. High infection rate and multifarious subtypes/recombinants circulating in this region are affecting the HIV epidemic in Asia even all the world. Geographically, Yunnan is located in the most southwestern China, bordering with Myanmar, Laos and Vietnam. Except Xinjiang province, Yunnan has the largest population of cross-border travelers, most of them were from Southeast Asia. As the major community in international business and trade, cross-border travelers and their related activities often lead to the spreading of infectious diseases. It was considered as “bridge” population, who transmitted HIV from Southeast Asian countries into China. The existence of the “bridge” population may accelerate the spreading of HIV-1 into other regions from Southeast Asian countries. However, HIV-1 infection rate and other epidemic characteristics of this bridge population are still unclear.

In current study, a total of 280,961 cross-border travelers who entry in last decade were recruited at the major land ports of Yunnan province for screening of HIV-1 infection, and corresponding demographic data is recorded. As results, the infection rate was detected as 0.85%, which is significant higher than general population, and have descendent tendency in the past decades. Comparatively, travelers entering at DeHong port have the highest HIV-1 infection rate (5.124%),
followed by Baoshan (0.884%), Lincang (0.833%) and Honghe (0.710%). Travelers with the age of 21-30 and 31-40 years were the major HIV-1 infected individuals, accounted for 38.45% and 37.77% of all HIV-1 positive cases respectively. Among the 7 occupations informed from infected population, driver was main occupation (42.38%) and the proportion of workers has increased year by year. Sexual transmission was identified as the main route (77.11%) of HIV-1 infection of this population.

In our knowledge, it is the first time to report on HIV-1 infection and the epidemiological characteristics of cross-border travelers with such long time span (10 years) and large-scale population (280,961 cases). The elucidation on HIV-1 infection among this bridging population, its descendent tendency in past decade and high geographical heterogeneity has definitely provided the necessary epidemiological data for the monitoring of HIV-1 epidemic among cross border travelers in Yunnan and further understanding of HIV-1 cross-border transmission. We believe that these findings are relevant to the scope of your journal and will be of interest to its readership.

Thank you for your consideration. We look forward to your kind reply.

Sincerely,
First Author: Binghui Wang
Faculty of Life Science and Technology, Kunming University of Science and Technology
No. 727 Jing Ming Road, Chenggong District, Kunming, Yunnan, China
Tel: 86-13987140390; Fax: 86-871-65920570; E-mail: binghuiwang@aliyun.com

Corresponding Author:
Prof. Xueshan Xia, Faculty of Life Science and Technology, Kunming University of Science and Technology, Kunming, Yunnan 650500, China.
Tel: 86-871-65920756; Fax: 86-871-65920570;
E-mail: oliverxia2000@aliyun.com