Author’s response to reviews

Title: High proportion of rural residents and multi-exposure history in human cases of avian influenza A (H7N9) virus in Zhejiang Province, China

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Author’s response to reviews: see over
Dear Editors,

We would like to submit the enclosed manuscript entitled “High proportion of rural residents and multi-exposure history in human cases of avian influenza A (H7N9) virus in Zhejiang Province, China”, which we wish to be considered for publication in “BMC infectious diseases”. No conflict of interest exits in the submission of this manuscript, and manuscript is approved by all authors for publication. I would like to declare on behalf of my co-authors that the work described was original research that has not been published previously, and not under consideration for publication elsewhere, in whole or in part.

A novel influenza A virus infection was identified on March 31, 2013. Then cases were confirmed in Zhejiang Province and the number of patients in Zhejiang Province is the largest in China to date. One case was confirmed on October 15 in Zhejiang Province indicating that H7N9 influenza infection come back again. We report the epidemiologic, clinical, and genomic characteristics of confirmed cases in Zhejiang Province. In the first half year, a total of 46 laboratory confirmed cases of H7N9 influenza infection were identified in the Zhejiang province of China of which 29 were male and 17 female. The median age of was 61.5 years and 76.09% occurred in persons aged ≥50 years old. Unlike other province, 34.78% of cases were rural residents. Among 11 deaths, 9 were male, 10 were older than 60 years old, and 10 had underlying diseases. 30 of 38 cases with available data had a recent history of poultry exposures and 8 cases had multi-exposure history. The estimated median incubation period was two days which was shorter than corresponding data in other provinces.
All cases were hospitalized and the median time from illness onset to hospitalization was 5 days. Symptoms at the onset of the illness included fever, cough, expectoration, shivering, Fatigue, muscular aches, nausea, vomiting. Only 4.91% contacts developed respiratory symptoms, designating lack of human-to-human transmission of the virus. H7N9 virus can survival and spread between -1°C and 32°C. All cases were sporadic and there was no evidence of an epidemiologic link between them. Our study indicated that control measures are needed not only in urban areas but also in rural areas to reduce human H7N9 infection risk. Human H7N9 infections may re-emerge as temperature drops. I hope this paper is suitable for “BMC infectious diseases”. To our knowledge, this is the first report of human H7N9 infections in rural areas with detailed epidemiological, clinical, and virological data. I look forward to receiving comments from the reviewers. If you have any queries, please don’t hesitate to contact me.

Thank you and best regards.

Yours sincerely,

Enfu Chen