Reviewer's report

Title: Influences on Influenza Transmission within Terminal Based on Hierarchical Structure of Personal Contact Network

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Reviewer: haiwen xu

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Title: Influences on Influenza Transmission within Terminal Based on Hierarchical Structure of Personal Contact Network
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Comments:

Discretionary Revisions:

This paper analyzed characteristics of influenza transmission in airport terminal based on a method combining hierarchical structure of personal contact network with agent-based SEIR model. The authors well defined the influences of passenger source, immunity difference and social relation structure on the influenza transmission. Moreover, influenza transmission process in airport terminal was fused in simulation, which showed the validity and feasibility of the method purposed by authors. Therefore, I think it is interesting and novel project in influenza spread. The authors construct a hierarchical structure of personal contact network in the specific environment, which is different from the personal contact model of general environment in other scholars' research. It may be more suitable for the evaluation of individual spatial information in small space. And the individuals’ spatial distribution information in terminal is shown clearly. In addition, this paper focuses on the process of influenza spread between individuals from the microscopic view, which clearly exhibits the dynamics of influenza transmission mechanism.

Furthermore, the authors select three representative factors on influenza spread in terminal. And the analyses of these influenza spread factors not only have the theoretical significance to reflect influenza transmission characteristics, but also have the practical significance to the prevention and control of influenza in airport terminal. However, I think some change need to be done. There are some grammatical and typographical mistakes in this paper, I advise the authors to make discretionary revisions.
Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests'