

# Review of: "When a Cluster Is a Cluster"

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## When a Cluster Is a Cluster

The topics of this paper are interesting, though well known, but structure and content must be revised, and results have to be better explained by the authors.

The title has to clarify that it refers to a cluster in the presence of epidemics and pandemics.

The abstract has to clarify the goal and the health and social policy implications for the next pandemics.

The paper can be extended.

The introduction has to better clarify the research questions of this study and provide more theoretical background about sources of transmission dynamics of COVID-19 (e.g., climate, international trade, air pollution, density, etc.) and risk factors in society, which can accelerate the creation of clusters and the diffusion of the novel coronavirus in the environment; after that, they can focus on the topics of this study to provide a correct analysis for fruitful discussion (See suggested readings that must be all read and used in the text).

Section 2 should also show how to analyze clusters in the context of network analysis with the index of betweenness, closeness, and centrality degree to show possible evolutionary dynamics (see paper on IEEE).

Section 3 has to be linked better to the previous section and how uncertainty can be analyzed in clusters with the entropy index in the early stage of pandemics, also considering tracing systems and other non-pharmaceutical measures.

The discussion has to be better underpinned in literature. First, authors have to synthesize the main results in a simple table to be clear for readers and then show what this study adds compared to other studies.

The conclusion has to be added as an autonomous section. The conclusion has not to be a summary, but authors have to focus on the manifold limitations of this study and provide suggestions for health, crisis management, and social policy, as well as how nations can prevent next pandemics with appropriate surveillance systems.

Overall, then, the paper is interesting, but it has to be extended.

## Suggested readings

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