

Response to reviewers

Reviewer 1

This study was a systematic literature review on environmental aspects of COVID-19 outbreak, they integrated COVID-19 outbreaks with environmental and human health perspectives. In cover letter, the author noted that they uploaded the manuscript titled “ Environmental Perspectives of COVID-19 Outbreaks – A Review ” for publication in *Environmental Advances*, please confirm that this manuscript has no multiple submissions. However, there are a number of concerns in the current study.

>> Sorry, for the inconvenience. Manuscript is not under multiple submissions.

1. Susceptibility of COVID-19. Please review the clinical characteristics and outcomes of children with COVID-19.

>> Revised accordingly.

2. Severity. As far as we know, severity is the main factor affecting the prognosis of patients with COVID-19, according to severity status, all patients were divided into group for general, severe, and critical. Please provide the perspective of severity of this disease.

>> It has been already mentioned in “CLINICAL CHARACTERISTICS OF COVID-19 INFECTION”. Now, this part is thoroughly revised as per required.

3. There are sporadic case reports of recurrence worldwide, you should discussed the phenomenon.

>> A separate section is added accordingly.

4. Some obvious errors in presentation should be corrected.

(1) SARS-CoV-2 Spike protein in pre-fusion conformation(in page 12, line 15),the word of Spike should be spike.

>> Done.

(2) 32.8% patients experienced with ARDS (95%CI, 13.7–51.8)(in page 12, line 21), the number of 95% CI should added %.

>> Done.

(3) COVID-10 patients' condition very critical (in page 15, line 16).It should been COVID-19 patients.

>> Done.

Reviewer 2

SPECIFIC COMMENTS TO AUTHORS

Interesting article in this particular historical period. it is clear and readable.

>> Thank you for your complement.

I still have some questions.

1.Why did you come to the conclusion that "SARS-CoV-2 could be used as angiotensin-converting enzyme 2 (ACE2), similar to SARS-CoV receptor for human infection" according to the above.

>> Because the genomic sequence of SARS-CoV-2 was matched with 79.5% genome sequence of SARS-CoV. The fact is clearly mentioned in the text.

2.There seems to be a mistake:" Although these 2 dogs showed any clinical signs, but one of the cats did have signs of illness."

>> There is nothing wrong. It has been revised as follows: "The dogs showed clinical signs, but one of the cats did not have signs of illness."

3.Page 14:"At haematological level"sounds a little bit awkward.

It has been revised as follows:

"Haematological assay revealed that most patients recorded decreased white blood cell counts, and lymphocytopenia^[27]."

4.How to determine the result of test is false-negative?

>> The result of test might be false positive due to lower sensitivity of assessment method. It has been mentioned clearly.

5.How does the air quality impact the COVID-19 infection and transmissions? Could you explain that "air pollution-to-human rather than to human-to-human transmission"?

>> Atmospheric particulate matter (PM) plays a vital role in COVID-19 transmission by creating a suitable environment. The issue has been addressed as follows:

“This PM induces inflammation in lung cells and exposure to PM increased the susceptibility and severity of the COVID-19 patient symptoms.” This type of transmission is called air pollution-to-human transmission.