

Peer Review File

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Reviewer A

Comment: This study investigated the prevalence of rotavirus and adenovirus infections in children in Hangzhou, China. In this global abnormal situation due to COVID-19 spread, surveillance studies should be greatly encouraged. However, this study contains a major concern. It only provided limited surveillance data during January-June 2020 in a single institute in China, and just compared it to that of 2019's. The decrease in acute gastroenteritis during lockdown period due to COVID-19 spread occurred worldwide, and similar data can be obtained easily at Infectious Diseases Weekly Report published by the National Institute of Infectious Disease in Japan or the summary of surveillance 2019 to 2020 published by public institutions in other countries. Therefore, it's not worth reporting if this study contains no molecular characterization of causal viruses or long-term surveillance data accompanied by COVID-19 epidemiology.

Reply: Thank you for your comments. In revised version, we added the data for the whole year of 2020. Our results reveal the changes in the original spectrum before and after the outbreak of COVID-19 in China, and the epidemiological changes of rotavirus and adenovirus. This study covers the whole period from outbreak to remission and then to effective control in 2020 in China, which has a good reference for other countries suffering from the epidemic of COVID-19. In revised version, we also added age and sex change distributions of 2019 and 2020. (Line 128-131, Line 143-157, Line 185-196).

Reviewer B

Comment: It is a little bit expected that any infectious disease will be reduced with the measures taken of lock-down. Therefore there is no much of a big surprise in observing what is reported. I just wanted to make a few comments that maybe could enhance the research. First, it is important to mention that the catchment area from where the children are normally recruited to go for the hospital visit has remained the same and that the birth rate has remained the same as well in 2019 and 2020. This should allow you to report that the denominator of your study have remained the same and the differences noted between the periods are absolute differences caused by the measures taken and not under the influence of other potential factors.

If I understand well the study was an observation on outpatients only and not on hospitalisations. Is there a reason to focus on outpatients only?

It would have been interesting to investigate age and sex change distributions of

2019 and 2020. Is it possible to report that as well? I don't expect changes but it would have been interesting to see what is happening.

You can put in your discussion section that whatever the infection in children would have been under study like flu or pneumococcal disease, it may have had the same effect of dramatic reductions. We have seen this reported on flu and pneumococcal disease in ageing adults. You could add in the discussion whether this could replace vaccination? I guess that vaccination has the advantage that it allows better movement of people and could be considered a better social measure than lockdowns.

I saw in the introduction that it is mentioned that rota can be transmitted by the respiratory tract... I don't know if that is correct or I'm not aware of that.

Small remark: it is mentioned in the method section that the STROBE checklist is followed. One of the first criteria of STROBE is that the title should indicate the type of study performed which is not communicated here.

Reply: Thank you for your comments. I will take your valuable advice. Although infectious diseases may be decreased after the lock-down measures taken, diarrhea has always been a critical issue in children's public health. Studying the epidemiological changes of diarrhea virus before and after the COVID-19 epidemic has a positive impact on improving the mortality and morbidity of diarrhea in children.

As the largest pediatric hospital in Zhejiang Province, the coverage area of our hospital in 2020 is the same as that in previous years. There is no significant difference in the birth rate between 2020 and 2019.

Because the diagnosis of pediatric diarrhea is often obtained in the outpatient clinic, our specimens are almost from outpatients. This does not mean that we only pay attention to outpatients rather than inpatients. Furthermore, the vast majority of children with intestinal infection have completed the diagnosis and treatment process in the outpatient department, and do not need hospitalization.

In revised version, we added age and sex change distributions of 2019 and 2020. (Line 128-131, Line 143-157, Line 187-198).

In our previous study, we found that respiratory tract infections in children significantly decreased during COVID-19 outbreak. In revised version, we have added this discussion (line170-172).

In revised version, we modified the description of transmission of rotavirus in children (line70).