## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

TITLE (PROVISIONAL)	Changes in paediatric dental clinic after reopening during COVID-19
	pandemic in Wuhan: a retrospective study
AUTHORS	Yang, Jinghui; Yang, Guobin; Jin, Runze; Song, Guangtai; Yuan,
	Guohua

### **VERSION 1 – REVIEW**

REVIEWER	Izzetti, Rossana
	University of Pisa, Unit of Dentistry and Oral Surgery, Department of
	Surgical, Medical and Molecular Pathology and Critical Care
	Medicine
REVIEW RETURNED	01-Feb-2021
GENERAL COMMENTS	<ul> <li>The present manuscript addresses the important topic of dental care in the COVID-19 era. However, there are some issues that need to be addressed:</li> <li>The performance of patient triage should be mentioned in the materials and methods section, and not only in the supplementary material. Moreover, in the literature, patient triage, both on the phone and upon patient arrival, has been previously reported as a valuable measure for risk assessment of COVID-19 infection and/or contact with infected/quarantined/at risk subjects. Please further discuss.</li> <li>The preventive measures adopted are mentioned in the Discussion instead of the results. Similarly, data on the number of visits performed are only presented in the discussion and not in the results. Please edit accordingly.</li> <li>The discussion should be overall reorganised, with a presentation of main findings, agreement/disagreement with previous literature, strengths/limitations, conclusions.</li> <li>English language presents some major flaws. The authors are suggested to have the manuscript revised by a native English speaker.</li> </ul>

REVIEWER	Hopcraft, M
	The University of Melbourne
REVIEW RETURNED	10-Feb-2021

GENERAL COMMENTS	Thank-you for the opportunity to review this paper. I have made a number of comments below:
	Introduction The authors state a high fatality rate for COVID-19. This is a somewhat contested space,

### **VERSION 1 – AUTHOR RESPONSE**

Responses (in bold font) to Reviewer 1

The present manuscript addresses the important topic of dental care in the COVID-19 era. However, there are some issues that need to be addressed:

Response:

Dear Dr. Rossana Izzetti,

Thank you for your kind comments.

1. The performance of patient triage should be mentioned in the materials and methods section, and not only in the supplementary material. Moreover, in the literature, patient triage, both on the phone and upon patient arrival, has been previously reported as a valuable measure for risk assessment of COVID-19 infection and/or contact with infected/quarantined/at risk subjects. Please further discuss.

Response: We appreciate your constructive suggestion. We added the performance of patient triage into the "Patient pathway for paediatric dental services" section in "Materials and Methods", and provided a more complete version in the Supplemental Material file. Based on your suggestion, we analyzed the patient triage both on the phone and upon patient arrival, and reflected on the deficiencies of our current patient triage system based on other literature, which was supplemented in the second paragraph of the Discussions section.

2. The preventive measures adopted are mentioned in the Discussion instead of the results. Similarly, data on the number of visits performed are only presented in the discussion and not in the results. Please edit accordingly.

Response: Thank you for your suggestion, we agree with you and have made changes accordingly. All content related to the experimental data in the Discussion section has been deleted and presented in the Results section instead, including preventive measures, data about the numbers of visits and of different treatment methods.

3. The discussion should be overall reorganised, with a presentation of main findings, agreement/disagreement with previous literature, strengths/limitations, conclusions.

Response: Thank you for the suggestions. The Discussions section has been reorganized, with the main finding of our study presented. The changes in paediatric patients and dentists after the COVID-19 pandemic were discussed emphatically, and the short-term impact of the pandemic on children's dental health care in Wuhan was analyzed. We also analyzed and added the agreement and disagreement with previous literature and explained the limitations of our study.

4. English language presents some major flaws. The authors are suggested to have the manuscript revised by a native English speaker.

Response: Thank you. The grammar mistakes have been revised by a native English speaker.

Responses (in bold font) to Reviewer 2

It's an interesting paper that provides some useful descriptive data on the change in pattern of dental service delivery in the early stages of the pandemic in Wuhan and the resumption of normal activity through to July.

Response:

Dear Dr. M Hopcraft,

Thank you for your kind comments.

#### 1. Introduction

The authors report a high fatality rate for COVID-19 of 5.5% - it's unclear whether this is a case fatality rate or infection fatality rate. A number of systematic reviews of put the IFR at around 0.7%

Response: We are grateful for your comments. We have re-searched the previous literature and selected a recent systematic review from Kumar et al. This study reported a case fatality rate up to 2.12% in WHO region-wise for COVID-19 pandemic, which was a latest systematic review. We selected this data to replace the 5.5% we originally presented.

#### 2. Results-Change in diagnosis

The change in % of different treatment types per month is compared, with the inference that there was a significant increase in retained primary teeth as a result of the pandemic – yet in actual terms the number decreased from 1010 in 2019 to 736 in 2020.

This is similar for caries, where although 31.58% of treatment in 2020 was for caries (compared to 28.93% in 2019), in actual terms it was only 2048 diagnoses in 2020 (compared to 3388 in 2019).

Response: Sorry for this confusion. In the original manuscript, we provided the number of total visits, the number of diagnoses for each disease, and the percentage of each diagnose. Due to the large difference in the total number of visits between 2019 and 2020, we did not directly compare the absolute number of people, but compared their proportions (%) instead. And it was found that there was an interesting change in the proportion of diagnoses. And we have modified the expression in the original manuscript to reduce the ambiguity according to your suggestion.

3. There was a large increase in the absolute number of children aged 0-3 yrs seen in 2020 compared to 2019. One explanation given is the increase in sweet/sugar consumption during the community blockade period from Jan – Apr (76 days) – it is unlikely that increased sugar consumption over this relatively short timeframe would account for a significant increase in dental caries in young children.

Response: Thank you for your suggestion, we agree with you and have made changes accordingly. We deleted the original ideas and the third paragraph in the Discussions section was edited.

4. The results show that there was a large decrease in the presentation of children overall, and of diagnoses of cases including caries, pulpitis and apical periodontitis over Apr-Jul 2020 compared to 2019. What happened to this children? Presumably the incidence of disease remains unchanged (or as alluded to with increased sugar consumption potentially increases), so you would expect that the treatment deferred through Jan-Apr (and even Man-June) would then present later with an excess of these presentations? It would be worth more exploration of the impact that this deferred care has had. The concern that others have raised (ie. Hopcraft & Farmer) is that delayed treatment can impact in terms of deterioration in oral health, poorer outcomes (ie. Caries that might require restoration ultimately requiring extraction due to deferred presentation) as well as prolonged pain/suffering and increased cost burden. It would be useful to have the authors expand on what they believe the short/medium term impacts are on the health of children in Wuhan.

Response: We appreciate your constructive suggestion. We have carefully read the relevant literature and used it as a reference for our study (Reference 27). And we compared the agreements and disagreements between our study and other literature, as well as the limitations of our study. The impact of the COVID-19 pandemic on children's dental health care in Wuhan City was mainly concentrated in the short-term impact. We hold the view that the medium-term and long-term impact was limited possibly, and follow-up research is needed to explore the deeper impact.

REVIEWER	Izzetti, Rossana
	University of Pisa, Unit of Dentistry and Oral Surgery, Department of
	Surgical, Medical and Molecular Pathology and Critical Care
	Medicine
REVIEW RETURNED	26-May-2021
GENERAL COMMENTS	No further comments
REVIEWER	Hopcraft, M
	The University of Melbourne
REVIEW RETURNED	26-May-2021
GENERAL COMMENTS	Thank you for your revision of the manuscript.

# VERSION 2 – REVIEW