

Peer Review File

Article information: <https://dx.doi.org/10.21037/tp-23-79>

Reviewer #A

1) First of all, my major concern for this study is that the hospital-based data cannot answer the research question of the impact of the pandemic on the unintentional harms in children. Only population-based surveillance data can answer this research question due to the poor representativeness of the hospital-based sample. The authors must revise the title and elsewhere to clearly indicate this. The current title is too broad and did not indicate the clinical research design of this study, the comparisons of pre- and during the pandemic.

Response : We agree with the reviewer's opinions very much that a single -center research is indeed less representative and cannot answer the research question of the impact of the pandemic on the unintentional harms in children. So, we changed the title and expounded the limitations of the study.

Changes in the text: we have modified our text as advised (see Page 1, lines 3-4, and Page 16, lines 514-Page 17, lines 516).

2) Second, the abstract is not adequate and needs further revisions. The background did not describe the public health significance of this research focus and what the knowledge gap is. The methods did not describe the inclusion of subjects, the generation of the two periods, before and during the periods, outcome data to be compared, and main statistical methods for the comparisons. The results need to first briefly report the clinical characteristics of the two samples and quantify the findings by using detailed outcome data and accurate P values. The conclusion needs more detailed comments for the public health implications of the findings.

Response: We thank the reviewer for the comment. The reviewers' comments make the abstract more complete, accurate and focused. Because of the limitations of this article, we have revised the purpose of this article. Besides we have added the knowledge gap, the inclusion of subjects, the definition of the two periods, the main statistical methods, the clinical characteristics of the two samples, the detailed outcome data and accurate P values as advised.

Changes in the text: We have revised our abstract according to the comments of the reviewer's carefully (see Page 2, line 35- Page 3, line 87).

3) Third, the introduction of the main text is not informative. The authors need to analyze the lifestyle, living environment, and parental style changes during the pandemic, review factors influencing the unintentional harms in children, speculate the changes in the unintentional harms based on these, analyze the knowledge gaps and limitations of prior studies, and clearly indicate the potential contribution of this research focus.

Response: We have carefully considered the suggestion of reviewer. We have revised the

introduction section as follows, increased changes in children's lifestyle during the epidemic, highlighted the impact of measures enforced during the epidemic on children, and added some previous studies and the limitations of this study.

Changes in the text: We have revised our text as advised (see Page 5, line 119- Page 6, line 153).

4) Fourth, in the methodology of the main text, the authors should correctly describe the clinical research design, a comparative study, not a retrospective cohort study since the two samples are not the same cohort. Please describe the denominator of the calculation for the incidence rates, which should be proportions in this study. In statistics, please handle the missing data not to ignore them, and ensure $P < 0.05$ is two-sided.

Response: We have learned a lot from the comment of reviewer's. We revised the type of article in the title and methods section. The study cannot reflect the incidence rate of accidental injuries in children; therefore, we used the number and proportion of cases to represent the occurrence of unintentional childhood injuries, and we indicated this clear in the conclusions section. At the same time, we have improved the description of statistics.

Changes in the text: We have revised our text as advised point by point.

Reviewer #B

1) This paper reports on unintentional childhood injuries, but also includes suicides and self-inflicted injuries. I would argue that these are not unintentional injuries. The manuscript title and abstract should reflect that both unintentional and intentional self-inflicted injuries and suicides are being described.

Response: We were really sorry to let you have such a question. In the analysis of poisoning cases, we found that some poisoning cases were caused by suicide, so we classified suicide and self-abuse separately, but did not consider that suicide and self-abuse were intentional injuries, so after our discussion, we deleted suicide and self-abuse cases and re-analyzed the data. Thank you again for the your suggestion.

Changes in the text: We have revised the whole article and deleted the part of suicides and self-abuse. (See Page 3, line 70; Page 3, lines 79-81; Page 7, line 195; Page 10, line 316-Page 11, lines 320; Page 15, line 476-Page 16, line 512)

2) The study includes children who were "treated and hospitalized." Please explain what this means. Does this include only injuries requiring admission to the hospital? Does it include children who were treated in the emergency department and discharged home? If only children admitted to the hospital were included, please explain why.

Response: Thank you for your question. In our study, we only included children admitted to the hospital. Because, the emergency department of our hospital is only an outpatient department, and no EICU has been established, so it does not have the ability to treat serious injuries. At the beginning of the study, we collected some cases of unintentional injury in emergency department, and found that the patients who were not admitted to hospital were mainly minor trauma, common gastrointestinal foreign bodies, etc. Therefore, after our discussion, we only selected inpatient cases.

3) “Mugginess” under data collection and analysis, line 136, is not a commonly used term in English. Please explain what this means or provide a different translation.

Response: What we want to express is a syndrome that because of excessive warmth preservation and suffocation for a long time, the infant will suffer from hypoxia, high fever, sweating, dehydration, convulsion and coma, and even respiratory and circulatory failure, so we change “Mugginess” to “Infant Muggy Syndrome”.

Changes in the text: We changed “Mugginess” to “Infant Muggy Syndrome”(see Page 7, line 194).

4) “Self-abuse” under data collection and analysis, line 137, is not a commonly used term in English. Please explain what this means.

Response: What we want to express is an act of hurting oneself. we have deleted suicide and self-abuse cases and re-analyzed the data.

5) The explanation of types of foreign bodies and location of foreign bodies should be reported in the results section prior to the discussion (lines 302-306). Descriptions of falls should also be included in the results section prior to the discussion (lines 331-332).

Response: We have adjusted the position of this part according to the comment of the reviewer (see Page 9, lines 275-281).

6) The terms “epidemic” and “pandemic” are both used interchangeably throughout the paper. Consistent language is needed.

Response: We have changed “epidemic” to “pandemic” according to the opinions of the reviewers.

Reviewer #C

1) Abstract, lines 44-45 – “non-accidental injuries... were excluded;” however, suicides and self-abuse were included in the results (line 59). This is contradictory. Later in the text and in the tables, “beating injuries” are included, which are also intentional in intent.

Response: We were really sorry to let you have such a question. We have deleted suicide and self-abuse cases and beating injuries cases, and re-analyzed the data. We are deeply sorry again.

Changes in the text: We have revised the whole article and deleted the part of suicides and self-abuse and beating injuries. (See Page 3, line 70; Page 3, lines 79-81; Page 7, lines 194-195; Page 10, line 316-Page 11, lines 320; Page 15, line 476-Page 16, line 512)

2) Introduction – I recommend that the authors discuss the published literature about child injuries during the pandemic more thoroughly. There has been more published than just references 8 and 9.

Response: In the introduction part, we added some published literature about child injuries during the pandemic (see Page 5, lines 126-131).

3) Only a 16-month period 1.January.2018 to 31.May.2019 was used for the pre-pandemic comparison period. We do not know what the overall pre-existing trend was based on only 16 months. In other words, it is possible that injuries were increasing prior to the pandemic, so the increase observed during the pandemic could be partly due to the pre-existing trend and not entirely attributable to the pandemic. A longer pre-pandemic period would be a better study design, and this would allow an interrupted time series analysis rather than simply descriptive statistics.

Response: We very agree with the reviewer that a 16 month period can not fully reflect the trend of unintentional injury of children before the pandemic, and it needs a longer period to support this finding. The data during the pandemic collected in this study is from 1 January, 2020 to 31 May, 2021. In order to match this time period, reduce the length of time and the impact of special time periods such as summer and winter holidays on the trend of unintentional injury, epidemiological experts suggest that we choose the same time period to comparison. In order to find out more evidence to answer accurately the impact of the pandemic on children's unintentional injury, we will conduct a multi-center, long-term study.

4) Methods, lines 126-132 – The authors state: “Data were collected through an electronic medical record system.” and “We supplemented the lost data through telephone follow-up and checked the patient’s medical records to ensure the authenticity and accuracy of the medical records.” This is not an adequate description of the methods. There are many sources describing what methods should be used/include for this type of retrospective descriptive study. How were data discrepancies resolved, what rules were used for data extraction from the EMR, etc. Here is one article by Gilbert and Lowenstein about chart reviews which has relevant guidelines: <https://www.semanticscholar.org/paper/Chart-reviews-in-emergency-medicine-research%3A-Where-Gilbert-Lowenstein/6f4a26dd52c358079e643513d386460138268850>

Response: Thank you very much for recommending this article to us. We have carefully read this article recommended by the reviewer and revised the research method.

Changes in the text: We have revised the methods. (See Page 6, line 179-183; Page 7, line 195-198)

5) What proportions of data were missing?

Response: The proportion of data missing is 4.5%.

6) Methods, line 136 – What does “mugginess” mean? What is a “hard object injury”?

Response: What we want to express about the word "mugginess" is that because of excessive warmth preservation and suffocation for a long time, the infant will suffer from hypoxia, high fever, sweating, dehydration, convulsion and coma, and even respiratory and circulatory failure, so we change it to “Infant Muggy Syndrome”. The phrases about “hard object injury” means a mechanical injury caused by the action of blunt objects. We changed it to “blunt injury”.

Changes in the text: We have changed these two phrases (see Page 7, line 194).

7) Methods, lines 140-142 and also in the Figures – These age groups are not mutually exclusive, which is a problem. In addition, what was the rationale for the age cutoff points?

Response: I am sorry to make you have such questions. Thank you for your comment and it makes our article more rigorous. We changed our expression as follow: Infant: <1 year; 1 years≤Toddler<3 years; 3 years≤Preschooler <6 years; 6 years≤School-aged child<12 years; and 12 years≤Adolescent <18 years. At the same time, we changed the expression of age groups in the full text.

The principle of the age cutoff points refer to the 8th edition of pediatric textbook published by the People's Medical Publishing House in China.

Changes in the text: We changed our expression (see Page 7, lines 202-206).

8) Conclusions, lines 417-418 – The authors state: “Therefore, during a major public health event, children 1–3 years old should pay attention to the prevention of foreign bodies...” This same statement can be made for this age group during non-pandemic times. These injuries are related to age-specific behaviors of exploration and are not associated specifically with a pandemic or major public health event.

Response: We very much agree with the reviewer. No matter before or during the epidemic, attention should be paid to the prevention of foreign bodies in toddler. So we modified our performance.

Changes in the text: we modified our performance (see Page 17, lines 536-537).

9) Limitations, lines 426-427 – First, the limitations usually appear at the end of the discussion section and before the conclusions.

The authors are correct when they state: “the study was a single-center study, the extrapolation of results is limited...”.

Response: We adjusted the position of “limitations” according to the comments of the reviewer (see Page 16, lines 513-Page 17, lines 521) .

Reviewer #D

1. Please check all abbreviations in the abstract and main text, such as below. All abbreviated terms should be full when they first appear.

32 **Background:** There are many articles related to child injuries during the COVID-19
33 in other countries, but only few studies in this field in China. This study analyzes the
238 and unintentional injury during the pandemic increased (8), but it only analyzed the
239 cases in ICU. The latest research reported that under the COVID-19 pandemic, there

Response : We have checked all the abbreviations of the paper to ensure that the abbreviations are full when they first appear. (See Page 2, line 41; Page 5, line 137; Page 7, line 213)

2. Please check the below sentence:

- 1) Please use the author’s last name “Temsah” in the below sentence.
- 2) Please check if any more references need to be added in the below sentence since you mentioned “Studies”, but only one reference was cited. If not, “studies” should be changed to

“a study/a previous study”.

926 in a significant increase in sharp injuries and crushing injuries. According to
927 Mohamad-Hani's studies (30), the educational childhood safety campaign for parents
928 and caregivers resulted in a significant increase in the overall knowledge and attitudes

Response : We have changed the author's first name to last name, and changed “studies” to “study”.(See Page 15, line 470)

3. Figure 1: There are two words “before”. Please revise.



Response : We have revised Figure 1 and submitted it as required.(See Page 31, Line 747)