

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Epidemiology of COVID-19 and effect of public health interventions, Chennai, India, March - October 2020 – An analysis of COVID-19 surveillance data
<b>AUTHORS</b>	M, Jagadeesan; Ganeshkumar, Parasuraman; Kaur, Prabhdeep; Masanam Sriramulu, Hemalatha; Sakthivel, Manikandanesan; Rubeshkumar, Polani; Raju, Mohankumar; Murugesan, Lakshmi; Ganapathi, Raajkumar; Srinivasan, Mahalakshmi; Sukumar, Aswini; Ilangovan, Kumaravel; Reddy, Madhusudhan; Shanmugam, Divyadarshini; Govindasamy, Prakash; Murhekar, Manoj

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Kelly, Sherrie Burnet Institute
<b>REVIEW RETURNED</b>	07-Jun-2021

<b>GENERAL COMMENTS</b>	<p><b>MAJOR COMMENTS</b></p> <p>1. Early on, can the authors comment on the current status of the COVID-19 epidemic in Chennai? Were their recommendations to maintain measures maintained during vaccination roll-out followed? If not, why not?</p> <p><b>MINOR COMMENTS</b></p> <p>Page 5</p> <p>2. Line 8: contributed to cases over the March-October 2020 period and/or to date?</p> <p>3. Line 13: could “case-patient” just be “case” (same throughout)? Add the word “conducted” ahead of “in one of the Government approved labs”. Also, should “Government” be capitalized?</p> <p>4. Line 22: replace “the” with “those” 61-80. Was there further disaggregation, i.e., 61-70, 71-80? And if so, was the prevalence highest among one of these groups? What was the prevalence and mortality among those with comorbidities?</p> <p>5. Lines 24-25: revise to “When lockdown began in March, Rt was high (4.2)”</p> <p>Page 6</p> <p>6. Line 8: revise “thickly” to “densely”</p> <p>7. Line 19: define GCC, it is defined on page 8, line 55, but should be defined on first use</p> <p>Page 7</p> <p>8. Line 6: revise to “with over 11 million” and last part of this sentence, revise “till” to “as of” and the comma after “March” is unnecessary</p> <p>9. Line 8: remove “the” within “in controlling the transmission” (same with line 15)</p> <p>10. Lin3 13: it would be useful to quantify how much contribution Chennai made.</p>
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	<p>11. Line 18: reverse the order of “complete” and “country-wide”</p> <p>12. Line 19: replace “given” with “permitted” and add the word “to help sustain”</p> <p>13. Line 24: change to “reported by”</p> <p>14. Line 28: remove “the” from “the disease symptoms”, and delete “among the public”</p> <p>15. Line 31: revise “for medical care” to “seeking medical care”</p> <p>16. Line 32: remove “the” from “after the relaxation”</p> <p>17. Line 34: add “are” to “but are not limited to”</p> <p>18. Line 35: what do unconventional interactions include?</p> <p>19. Line 38: revise “had given additional” with “paid extra”</p> <p>20. Line 54: use capitalization consistently in subheading(s)</p> <p>21. Line 57: revise to “South), and further divided”</p> <p>22. Line 58: do not capitalize “Zone” (same on page 8, line 7)</p> <p>Page 8</p> <p>23. Line 6: capitalize “Officer”, and add “who is responsible”</p> <p>24. Line 26: do not capitalize spelled version of NPIs</p> <p>25. Line 31: revise to “with the exception of essential”. And “All transport services”, next line “transportation” could be “transport”</p> <p>26. Line 33: change “gathering” to “gatherings”, and to “without exemption”</p> <p>27. Line 35: revise to “wearing masks while in public was”, and “International travellers”,</p> <p>28. Line 36: add a dash to “14-days”, use “GoI” versus “Govt”, revise to “May 4th, 2020”, and “and partial travel”</p> <p>29. Line 39: revise to “operate at 50%”</p> <p>30. Line 43: revise “marriage” to “weddings” or to “marriage ceremonies”, and the next line “trains and flights,” to “rail lines and flights operating, and”</p> <p>31. Line 45: revise to “travel from” and delete “onwards”</p> <p>32. Line 46: revise to “places of worship” and “operate at 100% capacity”</p> <p>33. Line 47: revise to “reopened inter-district”</p> <p>Page 9</p> <p>34. Line 22: should this be date of re-testing?</p> <p>35. Line 23: revise to “their health for a further seven days”</p> <p>36. Line 27: revise to “All contacts”, and “were asked to quarantine”, and “14-days” (same throughout)</p> <p>37. Lines 44 onward: remove bracketed letters, they are not necessary. Add commas before and after “Rt” or place in brackets</p> <p>Page 10</p> <p>38. Lines 14-15: revise to “by estimating the median number”</p> <p>39. Line 19: revise to “per month”</p> <p>40. Line 33: revise to “(39%) were 21-40 years of age and 66,616 (35%) 41-60 years”</p> <p>41. Lines 35-36: revise to “increase in May and peaked in June, after which it gradually declined through to the end of October”</p> <p>42. Line 47” add “respectively” after “1.4%,”</p> <p>43. Line 48: revise to “over 80 years”</p> <p>Figure 1: Remove “Chennai” from the market label on the left side for consistency.</p> <p>Figure 3: revise title typo to “RT-PCT</p> <p>Suppl table 2: again revise marriage to wedding, or marriage ceremony</p>
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<b>REVIEWER</b>	Garfield, Richard CDC
<b>REVIEW RETURNED</b>	13-Aug-2021

<b>GENERAL COMMENTS</b>	The description of the outbreak is fine but the conclusion that control measures did in fact control the epidemic is overstated. The data presented is good, but more limited in accuracy and comprehensiveness than authors suggest. This is also shown where authors state that closure of schools prevented pediatric cases. Even the available data show that control of the epidemic was more limited than one might wish. India is not unique in this - data limitations and unexpected changes in infection rates have affected us all.
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<b>REVIEWER</b>	Cash-Goldwasser, Shama Resolve to Save Lives, New York
<b>REVIEW RETURNED</b>	29-Aug-2021

<b>GENERAL COMMENTS</b>	<p>This is an important manuscript as it explores the community impacts of the pandemic and the public health experience in Chennai. It is highly relevant to public health efforts across LMIC to control the spread of COVID-19 using non-pharmaceutical interventions.</p> <p>With regards to my 'no' answers: 1) the results could be presented more clearly, as I have detailed below; 2) parts of the discussion should be reworked per my comments below; 3) the strength of the conclusion is not justified by the results; 4) the limitations mentioned are not sufficient, and I have suggested changes. Lastly, the standard of written English is acceptable for a draft, but this manuscript will need fairly extensive grammatical revision prior to publication.</p> <p>Comments to the authors to aid revisions:          Abstract - The stated objective is to describe the effects of public health strategies in controlling the COVID-19 pandemic from March to October 2020 in Chennai, India. The results include general incidence trends and the only measure mentioned is lockdown. It's light on results that would suggest a relationship between transmission and public health measures. The conclusion states that the intervention should be continued – so that implies lockdown – and I'm not convinced of the benefits of lockdown from the abstract, nor that continuing lockdown is tenable (or what you mean). Suggest revising abstract findings to focus on the stated objective (by including mention of some of the other public health measures and some of the headline findings from the manuscript) as well as revising the conclusion.</p> <p>Page 7, third paragraph – “laboratories were overloaded...” – split that sentence into two separate thoughts (testing limitations and contact tracing)</p> <p>Page 8, paragraph 2 – what actions were taken if there were isolation/quarantine violations?</p> <p>Page 8, paragraph 3 – Was masking enforced and how? How does “complete lockdown” differ from what has just been</p>
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	<p>described? Important to define as you use the term “complete lockdown” later in the text.</p> <p>Page 9, data analysis section – how was date of death defined? Was a lag incorporated (between cases and deaths) when estimating CFR?</p> <p>Page 10, results – specify when you are referring to cumulative incidence.</p> <p>Effect of public health interventions section: Revise this section so there is similar format and content for each sub-section: this will help the reader understand why date ranges chosen as they were, what the intervention were and the trends in outcome data. I suggest the following: 1) give both beginning and end dates in every bolded header (start date is missing from first section; end date is missing from the last section); 2) state in the first sentence why that date range was chosen and give exact dates society-level restrictions changed (e.g. exactly what changed on beginning date X and on end date Y); 3) present the same types of data in each section (e.g. why no information on hospital occupancy in section #1? why is do some sections but not others include data on the proportion of active cases isolating at home? why is CFR missing from some sections?) and in the same order as much as possible (e.g. interventions first, outcomes second); 4) when data are missing for a reason (e.g. testing rates and %pos only available after July, I recommend reminding the reader those data were not available; 5) always state starting AND ending numbers (e.g. “This led to an increase in the average number of tests done per million per day to 553” – state what the starting rate was, so the reader doesn’t have to search for it in the previous section; 6) avoid qualifiers like “high” and “remarkable” (just state findings). Lastly, I might de-emphasize the importance of the two super spreader events – it currently sounds like they were solely responsible for increase in Rt – but when I look at the figure 1 (incidence) I am seeing something different.</p> <p>May 4 to June 18 section: “The incidence was remarkably higher among adults above 40 years” – what does this mean, what are statistical test results?</p> <p>July 6 to Oct X 2020: “The gender (p-value – 0.04) and age groups (p-value &lt;0.001) significantly differed in terms of change of incidence from March to October 2020.” If you present this, what were the trends? With a general statement like this, it’s not clear what you observed and/or what it may mean. This is also an opportunity to make it clearer why chi-square testing was done to assess differences in incidence between ages/sexes in the first place.</p> <p>Discussion – paragraph 1: Readers may not be convinced that CT and home isolation made a big difference to transmission rates for at least two reasons: 1) there is mention of early detection of clusters; however, no CT timeliness metrics are included in the manuscript, and if CT isn’t timely the impact will be limited; 2) was there any education about infection control as part of isolation requirements (e.g. isn’t it possible home isolation resulted in increased transmission within households, including to at-risk elderly household members)? Also, this is the first mention of free hospital-based care and the idea that this was part of the suite of</p>
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	<p>interventions that helped control transmission. If this point is raised, need to mention this in the description of interventions, and specify in the operational definitions which health care centers were free.</p> <p>Discussion – paragraph 2: some of this paragraph reads like intro – description of public health system and should be moved to intro. Other parts reads like methods – description of the intervention (e.g. “In addition to monitoring compliance with the isolation, they also supported the family in procuring groceries, medicines and facilitated linkages with the health system”) – and should be moved there. Recommend limiting this paragraph to the type of content in second half (data from other places) and then having a separate paragraph for lessons learned. And speaking of lessons learned: could you offer more explanation why “In our experience, test positivity, incidence by geographic areas, case fatality ratio and % bed occupancy, were extremely useful in assessing the situation and adapting the strategies.” Because these are very different indicators (e.g. CFR is a lagging indicator), and it's unclear what adjustments were made in response to what – for example, it appears that the number of fever camps increased throughout the study period, and it's not specified that this was in response to any particular indicator (e.g. perhaps this was in response to %pos - I recommend explicitly stating this).</p> <p>Discussion – paragraph 3: major potential factor not mentioned: testing rates in different age groups, driven by differences in disease severity and behavior.</p> <p>Discussion – paragraph 4: I think the point that should be made here is how Chennai's death rate compared to Tamil Nadu – why the difference? Fine to compare with other major causes of death, but the point about other respiratory infections has lost me – I'm not sure why we would expect mortality due to resp infections to stay similar during a pandemic caused by a resp virus.</p> <p>Strengths and limitations – I am not sure that lacking severity data is a major limitation of this analysis (which was not focused on changes in triage/clinical care). I think limited testing is not the only reason incidence may have been underestimated. Plus, you can be much more straightforward: we know that total infections and deaths are significantly under-represented in reported data. Other major limitations to mention: 1) temporal association does not imply causation; there are other factors that may have contributed to observed epi trends (including behavioral trends in care seeking, immunity from natural infection, influences of weather on behavior, etc); 2) CFRs may fluctuate over the course of an epidemic because of patterns in detection/care seeking/treatment, etc; 3) some of your indicators (e.g. hosp, death, CFR) are lagging and thus may reflect policy/public health changes made weeks prior.</p> <p>Conclusion: I think you can only conclude that community-centric public health strategies were associated with (or may have contributed to) control of the COVID-19.</p> <p>Figure 1 – A suggestion: you could add more of the policy changes (in supplemental table 2) to this figure: could have a legend where activities are color coded and then use colored arrows pointing</p>
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	<p>forward and backward on the dates that activities were allowed or not allowed. Then would not also need supplementary table 2.</p> <p>Supplementary Table 3 – would also have incidence per pop (or instead of raw number if they don't both fit)</p> <p>I recommend at least one figure (maybe more than one) than includes trends in interventions superimposed on trends in outcome indicators (e.g. testing rate and/or number of fever camps, plus incidence and/or hosp rate).</p>
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**VERSION 1 – AUTHOR RESPONSE**

5	Reviewer 1	Early on, can the authors comment on the current status of the COVID-19 epidemic in Chennai? Were their recommendations to maintain measures maintained during vaccination roll-out followed? If not, why not?	We thank the reviewer for the suggestion. COVID-19 vaccination for general public was initiated in March 2021 in India. After the first wave, public health measures were continued. However, resurgence of delta variant in March 2021 led to second wave despite the interventions. We have described only the first wave of COVID-19 in this manuscript and hence, the details regarding vaccination and second wave are beyond the scope of this paper	
6	Reviewer 1	Contributed to cases over the March-October 2020 period and/or to date?	Contributed to more than half of the COVID-19 cases in India from March till May 2020	p2 - line 5
7	Reviewer 1	Could “case-patient” just be “case” (same throughout)? Add the word “conducted” ahead of “in one of the Government approved labs”. Also, should “Government” be capitalized?	<p>We have changed the word "case-patient" to "case" throughout</p> <p>We have added the word "conducted"</p> <p>We have changed Capital "G" in the word "Government" has to lower case in the appropriate places</p>	p2- line 6, 8 & 13

8	Reviewer 1	Replace “the” with “those” 61-80. Was there further disaggregation, i.e., 61-70, 71-80? And if so, was the prevalence highest among one of these groups? What was the prevalence and mortality among those with comorbidities?	We have replaced the word "the" with "those"  The surveillance system did not capture the information on comorbidity. Hence, we could not analyze the prevalence and mortality among those with comorbidity	p2 - line 15
9	Reviewer 1	Revise to “When lockdown began in March, Rt was high (4.2)”	Revised as "When lockdown began in March	p2 - line 17 & 18
10	Reviewer 1	Revise “thickly” to “densely”	Revised the word "thickly" to "densely"	p3 - line 7
11	Reviewer 1	Define GCC, it is defined on page 8, line 55, but should be defined on first use	Expanded GCC as Greater Chennai Corporation	p3 - line 17
12	Reviewer 1	Revise to “with over 11 million” and last part of this sentence, revise “till” to “as of” and the comma after “March” is unnecessary	Revised to "with over 11 million", changed the word "till" to "as of" and removed the comma after March	p4 - line 4 & 5
13	Reviewer 1	Remove “the” within “in controlling the transmission” (same with line 15)	Removed "the" from the sentence	p4 - line 6
14	Reviewer 1	It would be useful to quantify how much contribution Chennai made	Added the % of cases contributed by Chennai	p4 - line 10
15	Reviewer 1	Reverse the order of “complete” and “country-wide”	Reversed the order	p4 - line 13&14
16	Reviewer 1	Replace “given” with “permitted” and add the word “to help sustain”	Replaced the word "given" with "permitted" and added	p4 - line 15
17	Reviewer 1	Change to “reported by”	Changed "reported until" to "reported by"	p4 - line 19
18	Reviewer 1	Remove “the” from “the disease symptoms”, and delete “among the public”	Removed "the" and deleted "among the public"	p4 - line 22&23
19	Reviewer 1	Revise “for medical care” to “seeking medical care”	Changed to "seeking medical care"	p4 - line 25
20	Reviewer 1	Remove “the” from “after the relaxation”	Removed "the" from the phrase "after the relaxation"	p4 - line 26
21	Reviewer 1	Add “are” to “but are not limited to”	Added "are" to "but not limited to"	p4 - line 28

22	Reviewer 1	What do unconventional interactions include?	We have removed the sentence	p4 - line 28-29
23	Reviewer 1	Revise “had given additional” with “paid extra”	Revised "had given additional" with "paid extra"	p4 - line 31
24	Reviewer 1	Use capitalization consistently in subheading(s)	Capitalization changed wherever necessary	p4 - line 44
25	Reviewer 1	Revise to “South), and further divided”	Added "and" as suggested	p4 - line 45
26	Reviewer 1	Do not capitalize “Zone” (same on page 8, line 7)	Removed the capitilization as suggested	p5 - line 1 & 7
27	Reviewer 1	capitalize “Officer”, and add “who is responsible”	Capitalized the word "Officer" and added the phrase "who is responsible"	p5 - line 6 & 7
28	Reviewer 1	Do not capitalize spelled version of NPIs	Removed the capitilization as suggested	p5 - line 25
29	Reviewer 1	Revise to “with the exception of essential”. And “All transport services”, next line “transportation” could be “transport”	Revised the phrase to "with the exception of essential goods" and removed "the" from "All the transport services"	p5 - line 29 & 30
30	Reviewer 1	Change “gathering” to gatherings”, and to “without exemption”	Changed “gathering” to gatherings”, and removed "any" from “without any exemption”	p5 - line 31
31	Reviewer 1	Revise to “wearing masks while in public was”, and “International travellers”	Revised to “wearing masks while in public was”, and “International travellers”	p5 - line 31 & 32
32	Reviewer 1	Add a dash to “14-days”, use “Gov” versus “Govt”, revise to “May 4th, 2020”, and “and partial travel”	Added dash to "14 days", changed "Govt" to "Gov", revised "4th May 2020" to "4 May 2020" to maintain consistency and removed "the" from "the partial travel"	p5 - line 33 & 34
33	Reviewer 1	Revise to “operate at 50%”	Revised to “operate at 50%”	p5 - line 36
34	Reviewer 1	Revise “marriage” to “weddings” or to “marriage ceremonies”, and the next line “trains and flights,” to “rail lines and flights operating, and”	Revised “marriage” to “weddings” and “trains and flights,” to “rail lines and flights operating, and”	p5 - line 39 & 40
35	Reviewer 1	Revise to “travel from” and delete “onwards”	Revised to “travel from” and deleted “onwards”	p5 - line 41

36	Reviewer 1	Revise to “places of worship” and “operate at 100% capacity	Revised to “places of worship” and “operate at 100% capacity	p5 - line 42
37	Reviewer 1	Revise to “reopened inter-district”	Revised to “reopened inter-district”	p5 - line 43
38	Reviewer 1	Should this be date of re-testing?	No. The asymptomatic individuals are considered discharged ten days after the date of initial testing; added "if symptomatic" after "date of testing" to make it clearer	p6 - line 21
39	Reviewer 1	Revise to “their health for a further seven days”	Revise to “their health for a further seven days”	p6 - line 23
40	Reviewer 1	Revise to “All contacts”, and “were asked to quarantine”, and “14-days” (same throughout)	Removed "the" from “All the contacts”, changed "quarantined" to “were asked to quarantine”, and added dash to “14 days”	p6 - line 25
41	Reviewer 1	Remove bracketed letters, they are not necessary. Add commas before and after “Rt” or place in brackets	Removed bracketed letters. Placed “Rt” in brackets	p6 - line 43
42	Reviewer 1	Revise to “by estimating the median number”	Revised to “by estimating the median number”	p7 - line 14
43	Reviewer 1	Revise to “per month”	Revised to “per month”	p7 - line 17
44	Reviewer 1	Revise to “(39%) were 21-40 years of age and 66,616 (35%) 41-60 years”	Revised to “(39%) were 21-40 years of age and 66,616 (35%) 41-60 years”	p7 - line 28 & 29
45	Reviewer 1	Revise to “increase in May and peaked in June, after which it gradually declined through to the end of October”	Revised to “increase in May and peaked in June, after which it gradually declined through to the end of October”	p7 - line 29 & 30
46	Reviewer 1	Add “respectively” after “1.4%,”	Added “respectively” after “1.4%,”	p7 - line 38
47	Reviewer 1	Revise to “over 80 years”	Changed "above 80 years" to "over 80 years"	p7 - line 39
48	Reviewer 1	Figure 1: Remove “Chennai” from the market label on the left side for consistency.	Removed "Chennai" from the market label	Figure 1
49	Reviewer 1	Figure 3: revise title typo to “RT-PCT	Revised the title typo from "Rt-PCR" to "RT-PCR"	p18

50	Reviewer 1	Suppl table 2: again revise marriage to wedding, or marriage ceremony	Revised "Marriage" to "wedding" in all the places	Supplementary table
51	Reviewer 2	The description of the outbreak is fine but the conclusion that control measures did in fact control the epidemic is overstated. The data presented is good, but more limited in accuracy and comprehensiveness than authors suggest. This is also shown where authors state that closure of schools prevented pediatric cases. Even the available data show that control of the epidemic was more limited than one might wish. India is not unique in this - data limitations and unexpected changes in infection rates have affected us all.	We agree with the suggestion. 1) We have modified our conclusion as "public health strategies might have contributed to controlling the COVID-19 outbreak". 2) In the limitations, we have added that "we could not ascertain the causal association between the public health interventions and the control of the outbreak, as many other factors at the policy and individual level could have influenced the outcomes". 3) We have modified as "Low incidence might have been due to the closure of educational institutions throughout the period"	p10 - line 45-46 p11 - line 27-30 p11 - line 34-35
52	Reviewer 3	Abstract - The stated objective is to describe the effects of public health strategies in controlling the COVID-19 pandemic from March to October 2020 in Chennai, India. The results include general incidence trends and the only measure mentioned is lockdown. It's light on results that would suggest a relationship between transmission and public health measures. The conclusion states that the intervention should be continued – so that implies lockdown – and I'm not convinced of the benefits of lockdown from the abstract, nor that continuing lockdown is tenable (or what you mean). Suggest revising abstract findings to focus on the stated objective (by including mention of some of the other public health measures and some of the headline findings from the manuscript) as well as revising the conclusion.	We thank the reviewer for the suggestion. We have modified the abstract as per the suggestion	p2
53	Reviewer 3	Page 7, third paragraph – “laboratories were overloaded...” – split that sentence into two separate thoughts (testing limitations and contact tracing)	The sentence has been split into two separate thoughts	p4 - line 25, 26 & 27

54	Reviewer 3	Page 8, paragraph 2 – what actions were taken if there were isolation/quarantine violations?	Those who violated the home isolation/quarantine were moved to facility isolation or quarantine for free of cost.	p5 - line 23 & 24
55	Reviewer 3	Page 8, paragraph 3 – Was masking enforced and how? How does “complete lockdown” differ from what has just been described? Important to define as you use the term “complete lockdown” later in the text.	Yes, masking was made compulsory while in public and those who did not wear the mask appropriately were fined. The Government of India (GoI) implemented a complete lockdown from 24 March to May 3, 2020. We have given the details of the restrictions during this period in the same paragraph (p5 - line 29-35)	p5 - line 33 & 34
56	Reviewer 3	Page 9, data analysis section – how was date of death defined? Was a lag incorporated (between cases and deaths) when estimating CFR?	We considered the date of declaration of death as the date of death. The surveillance system ascertained the treatment outcome (including death) of each case reported during the study period. We estimated CFR as number of deaths among the COVID-19 cases reported divided by the number of COVID-19 cases reported. Since the outcome of each case was ascertained, we did not incorporate the time lag when estimating CFR	p6 - line 43
57	Reviewer 3	Page 10, results – specify when you are referring to cumulative incidence.	As suggested, we included the term "cumulative" while referring to cumulative incidence	p7 - line 33-36

58	Reviewer 3	<p>Effect of public health interventions section: Revise this section so there is similar format and content for each sub-section: this will help the reader understand why date ranges chosen as they were, what the intervention were and the trends in outcome data. I suggest the following: 1) give both beginning and end dates in every bolded header (start date is missing from first section; end date is missing from the last section); 2) state in the first sentence why that date range was chosen and give exact dates society-level restrictions changed (e.g. exactly what changed on beginning date X and on end date Y); 3) present the same types of data in each section (e.g. why no information on hospital occupancy in section #1? why is do some sections but not others include data on the proportion of active cases isolating at home? why is CFR missing from some sections?) and in the same order as much as possible (e.g. interventions first, outcomes second); 4) when data are missing for a reason (e.g. testing rates and %pos only available after July, I recommend reminding the reader those data were not available; 5) always state starting AND ending numbers (e.g. "This led to an increase in the average number of tests done per million per day to 553" – state what the starting rate was, so the reader doesn't have to search for it in the previous section; 6) avoid qualifiers like "high" and "remarkable" (just state findings). Lastly, I might de-emphasize the importance of the two super spreader events – it currently sounds like they were solely responsible for increase in Rt – but when I look at the figure 1 (incidence) I am seeing something different.</p>	<p>1) As suggested, we have added both beginning and end dates in every bolded header</p> <p>2) As suggested, we have added the reason for the selection of the date range in the bracket. We have also added briefly what happened during that period as the first few sentences</p> <p>3) As per the suggestion, we have arranged each section in this order - interventions in numbers (camps, testing, contact tracing), followed by incidence, CFR, Rt and then about isolation &amp; bed occupancy</p> <p>4) As suggested, we have mentioned about missing data during each time period</p> <p>5) Added the starting numbers as per the suggestion</p> <p>6) We have removed the qualifiers wherever necessary</p> <p>In April and May, the two super spreader events happened when the daily number of cases at the baseline were low. Since the Rt is calculated using the reported number of cases, the low baseline increased the Rt values during these months. At that point of time, the spread of COVID-19 was mainly because of these two events</p>	p8 & p9
59	Reviewer 3	<p>May 4 to June 18 section: "The incidence was remarkably higher among adults above 40 years" – what does this mean, what are statistical test results?</p>	<p>We have removed the qualifier "remarkably" from the sentence</p>	p8 - line 26

60	Reviewer 3	<p>July 6 to Oct X 2020: “The gender (p-value – 0.04) and age groups (p-value &lt;0.001) significantly differed in terms of change of incidence from March to October 2020.” If you present this, what were the trends? With a general statement like this, it’s not clear what you observed and/or what it may mean. This is also an opportunity to make it clearer why chi-square testing was done to assess differences in incidence between ages/sexes in the first place.</p>	<p>We assessed how the incidence changed over time in different age groups and gender, and whether there was any difference across the groups regarding this change over time. As mentioned in the data analysis section, we used Friedman's test to assess this difference, as the dependent variable (incidence) did not follow normal distribution and compared over multiple time period across the groups</p>	<p>p9 - line 20-22</p>
61	Reviewer 3	<p>Discussion – paragraph 1: Readers may not be convinced that CT and home isolation made a big difference to transmission rates for at least two reasons: 1) there is mention of early detection of clusters; however, no CT timeliness metrics are included in the manuscript, and if CT isn't timely the impact will be limited; 2) was there any education about infection control as part of isolation requirements (e.g. isn't it possible home isolation resulted in increased transmission within households, including to at-risk elderly household members)? Also, this is the first mention of free hospital-based care and the idea that this was part of the suite of interventions that helped control transmission. If this point is raised, need to mention this in the description of interventions, and specify in the operational definitions which health care centers were free.</p>	<p>1) We agree with the reviewer that we could not document the timeliness of contact tracing and compliance to infection control practices during home isolation. We have added this as a limitation. We have changed the word "clusters" to "cases". We refer to early detection of cases through active door-to-door surveillance by the volunteers</p> <p>2) Yes, at first place, doctors allowed home isolation only for those COVID-19 positive individuals whose house has at least one separate bed room with attached bathroom, as certified by the sanitary inspectors by direct visit to their house. And an information sheet with infection control practices was given to those permitted for home isolation. We have added this under the section operational definition for home isolation</p> <p>3) We have added the point about free hospital-based care under "Description of interventions" as suggested</p>	<p>p5 - line 17-19, 21-24  P6 - line 28-32  p9 - line 40</p>

62	Reviewer 3	<p>Discussion – paragraph 2: some of this paragraph reads like intro – description of public health system and should be moved to intro. Other parts reads like methods – description of the intervention (e.g. “In addition to monitoring compliance with the isolation, they also supported the family in procuring groceries, medicines and facilitated linkages with the health system”) – and should be moved there. Recommend limiting this paragraph to the type of content in second half (data from other places) and then having a separate paragraph for lessons learned. And speaking of lessons learned: could you offer more explanation why “In our experience, test positivity, incidence by geographic areas, case fatality ratio and % bed occupancy, were extremely useful in assessing the situation and adapting the strategies.” Because these are very different indicators (e.g. CFR is a lagging indicator), and it’s unclear what adjustments were made in response to what – for example, it appears that the number of fever camps increased throughout the study period, and it’s not specified that this was in response to any particular indicator (e.g. perhaps this was in response to %pos - I recommend explicitly stating this).</p>	<p>We have edited the paragraph and moved description of interventions to "methods". We have retained the other information for which the detailed explanation is given here.</p> <p>We have to start the paragraph by describing the context and the setting of the outbreak. It is important for the readers to understand the health care system in urban India is highly fragmented and therefore additional resource mobilization was critical to mount the response. Within the country, few cities were able to do this better than the others. Since, we do not have the data from other cities in the public domain, we are unable to make comparisons. However, going forward, this has implications for pandemic preparedness in the context of poorly funded &amp; managed urban healthcare systems.</p> <p>We have revisited the indicators during COVID-19 second wave and based on our experience over the past one and half years, we found that CFR was not a helpful indicator. The incidence of cases was the first indicator to change, followed by test positivity% which required few weeks of persistent change. The increase in incidence and test positivity triggered the health system to look for clusters. The geographic areas or population with upward trend were prioritized for increasing case search and testing. The oxygen bed occupancy was the most important indicator to make decisions regarding restrictions and lockdowns. We have made these changes in our discussion</p>	<p>p5 - line 16-19, 29-30 p10 - line 9-15, line 40-46</p>
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63	Reviewer 3	Discussion – paragraph 3: major potential factor not mentioned: testing rates in different age groups, driven by differences in disease severity and behavior.	We agree with the reviewer that this information is very important. However, we did not have the testing data by age group and disease severity	
64	Reviewer 3	Discussion – paragraph 4: I think the point that should be made here is how Chennai's death rate compared to Tamil Nadu – why the difference? Fine to compare with other major causes of death, but the point about other respiratory infections has lost me – I'm not sure why we would expect mortality due to resp infections to stay similar during a pandemic caused by a resp virus.	We agree with the reviewer and removed this part from the discussion	p11
65	Reviewer 3	Strengths and limitations – I am not sure that lacking severity data is a major limitation of this analysis (which was not focused on changes in triage/clinical care). I think limited testing is not the only reason incidence may have been underestimated. Plus, you can be much more straightforward: we know that total infections and deaths are significantly under-represented in reported data. Other major limitations to mention: 1) temporal association does not imply causation; there are other factors that may have contributed to observed epi trends (including behavioral trends in care seeking, immunity from natural infection, influences of weather on behavior, etc); 2) CFRs may fluctuate over the course of an epidemic because of patterns in detection/care seeking/treatment, etc; 3) some of your indicators (e.g. hosp, death, CFR) are lagging and thus may reflect policy/public health changes made weeks prior.	We agree with the reviewer and added the role of other factors under limitations	
66	Reviewer 3	Conclusion: I think you can only conclude that community-centric public health strategies were associated with (or may have contributed to) control of the COVID-19.	We have modified the conclusion as per the suggestion	

67	Reviewer 3	Figure 1 – A suggestion: you could add more of the policy changes (in supplemental table 2) to this figure: could have a legend where activities are color coded and then use colored arrows pointing forward and backward on the dates that activities were allowed or not allowed. Then would not also need supplementary table 2.	<p>1) As per the suggestion, we have added more policy changes to the figure 1</p> <p>2) We have colour coded the increase and decrease in the restrictions</p>	
68	Reviewer 3	Supplementary Table 3 – would also have incidence per pop (or instead of raw number if they don't both fit)	We thank the reviewer for the suggestion. We have given the incidence per population in Table 1	
69	Reviewer 3	I recommend at least one figure (maybe more than one) than includes trends in interventions superimposed on trends in outcome indicators (e.g. testing rate and/or number of fever camps, plus incidence and/or hosp rate).	<p>We thank the reviewer for the suggestion. We have given the trend of testing rate (number of tests per million) with test positivity% in Figure 4. We have shown the trend in incidence using epicurve (Figure 1) and the map, which gives incidence per million by zone and month (Figure 2)</p> <p>1) We have superimposed the restrictions on the epicurve (Figure 1)</p> <p>2) We have given the trend of test per million and test positivity% in the same graph (Figure 4)</p>	

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Cash-Goldwasser, Shama Resolve to Save Lives, New York
<b>REVIEW RETURNED</b>	08-Nov-2021

<b>GENERAL COMMENTS</b>	<p>These are the line numbers from the word doc, as my PDF line numbers were not aligned.</p> <p>Page 2, lines 5-6: you don't need to say who implemented (e.g. GCC) until the main text.</p> <p>Page 3, lines 3-5: Not sure you can claim that these strategies controlled COVID-19, just that there was an association. Suggest, "We did a comprehensive analysis of the association between feasible community-centric public health strategies and the spread</p>
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	<p>and impact of COVID-19 over time during an outbreak in a large, densely populated metropolitan city in India.”</p> <p>Page 4, line 2: Define the acronym COVID-19.</p> <p>Page 4, line 5: Change to: “Major outbreaks have been major hubs for outbreaks worldwide, which has posed challenges....”</p> <p>Page 4, line 7: Change ‘faced’ to ‘reported’</p> <p>Page 4, line 9: ‘Till’ is not clear – is it ‘to’ or ‘through’ (inclusive or exclusive of May).</p> <p>Page 4, line 10: Grammatical construction makes meaning ambiguous; suggest: “The density of population, predominance of inter-generational families, and frequent socialising of extended families and friends made it challenging to control transmission.”</p> <p>Page 4, lines 15-17: Suggest “Despite the lockdown, it was difficult to control the spread of COVID-19 in Chennai, the capital city of the southern state of Tamil Nadu.”</p> <p>Page 4, line 19: Exact numbers are given, so why “about?”</p> <p>Page 4, lines 27-29: You have circled back to comments on cities but the first paragraph of the intro was about this, would consolidate in one place.</p> <p>Page 4, line 32: which health workforce? Public health or health care? Both?</p> <p>Page 4, line 39-41: Again, I do not think you can claim causation. Suggest: “In this paper, we described the public health interventions undertaken to control the COVID-19 epidemic in Chennai, India, from March to October 2020, and examine associations between these interventions and the spread and impact of COVID-19.”</p> <p>Page 4, lines 44-45: Describe GCC (e.g. Public health org? Gov? Private?)</p> <p>Page 5, line 2: one of the most crowded in India? In the world? How do you know? Suggest “a crowded wholesale fruit/vegetable market”</p> <p>Page 5, line 4: define IT if you use it</p> <p>Page 5, lines 14-15: suggest: “The central strategy was to conduct surveillance and testing closer to home, including field-based contact tracing in the streets when a cluster of cases was reported.”</p> <p>Page 5, lines 20-23: suggest: “All individuals who tested positive for COVID-19 were offered free transport, and free admission if necessary, to Government COVID-19 hospitals and COVID Care Centres (CCC).”</p> <p>Page 5, lines 23-25: suggest: “Another innovative strategy was to identify 3500 young adults to be FOCUS (Friends of COVID persons Under Surveillance) volunteers in their own communities.”</p>
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	<p>Page 5, lines 31 and 33: is the state government different than Gol?</p> <p>Page 5, lines 38-39: Enforcement of mitigation strategies has been difficult everywhere. Unless you can say that everyone who did not wear a mask correctly was fined, I suggest: "Wearing masks while in public was compulsory since mid-April, and those who did not wear masks appropriately could be fined."</p> <p>Page 6, line 3: COVID-19 is the disease, not the infection.</p> <p>Page 6, line 12: so being in the same office room, but for less than 15 min or more than 6 feet apart was considered an exposure?</p> <p>Page 6, line 14-15: there was a distinction between mild and very mild? If there was no formal distinction, suggest not using 'mild' and comment applies throughout (including 'very mild symptoms' – just say mild)</p> <p>Page 6, lines 20-22: Confusing. If alternative causes don't count, delete: "unless there is an alternative cause of death that cannot be related to COVID diseases such as trauma without a period of complete recovery between illness and death." If alternative causes DO count if there hasn't been recovery from covid, you don't want the word 'unless.'</p> <p>Page 6, line 50. Would say that you then 'stratified' incidence by demographics factors you mention, rather than defining incidence that way. Move all stratification discussing to data analysis.</p> <p>Page 7, lines 18-28: this is secondary outcomes of interest, not analytic methods.</p> <p>Page 7, lines 41-42: why no statistical testing between males and female incidences (you claim males 'higher')?</p> <p>Page 8, lines 4-5: why no statistical testing between males and female incidences (you claim males 'higher')?</p> <p>Page 8, line 10: delete "owing to intense lockdown measures."</p> <p>Page 8, lines 23-24: Suggest: "incidence increased from 107 per million in April to 1694 per million in May"</p> <p>Page 8, lines 24-25 and lines 31-32: Put all CFR in one sentence, and not mixed with other indicators (e.g. not in same sentence with incidence of home isolation).</p> <p>Page 8, line 44: Rt was much higher before. Suggest: "The maximum Rt during this period was.."</p> <p>Page 9, line 14-15: what is extended to home contacts ratio?</p> <p>Page 9, line 18: don't need to specify that incidence is per million.</p> <p>Page 9, lines 20-21: Need to be more specific. How is there one p-value for all ages (which ages are being compared)? Which ages? What are the numbers (both for age and gender).</p>
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	<p>Page 9, lines 21-22: delete: “That is, different age groups and gender had different rates of change in incidence.” Redundant.</p> <p>Page 9, lines 24-25: how many zones are there in total? Is 8 most of them or a small proportion?</p> <p>Page 9, lines 32-38: throughout this paragraph, specify which beds you are referring to. First you talk about beds generally (is this public and private? Including ICU?) Then ICU, oxygen – are those CCC? Or from the first totals? Why divide ICU (and no other bed types) by public/private?</p> <p>Page 9, lines 41-42: Suggest discussing association and the possibility of causation: “Our analysis showed that implementation of a combination of interventions was associated with decreasing transmission and may have resulted in a reduction of COVID-19 cases despite easing of restrictions.”</p> <p>Page 9, lines 43-44: There are congested urban slums in China. Compliance is more complicated than whether the setting is a crowded urban slum or not. Also, this study did not examine compliance rates across countries (or even within India), so I would not focus on that. Suggest something like: “Studies have shown that in China and European countries, lockdown measures led to a decline in cases [21–26]. In India as elsewhere, effective pandemic control required adaptation of mitigation strategies to the local setting, and this was particularly challenging in highly congested urban slums.”</p> <p>Page 9-11, Discussion: 1) You are missing the main part of the discussion: you need a paragraph that focuses on the main results you have just presented: the association between implementation of strategies and declining indicators, why you think there was an association/potential causation, and similar data from other sites/studies. The content from Page 10, line 43 through page 11, line 12 should be moved up to be with this main part of the discussion.</p> <p>Page 10, lines 5-41. Up until now, this paper has been an analysis of interventions and COVID-19 indicators. Now you shift to talking about how “we” designed interventions, which is not the focus of the paper. A long discussion of how interventions were designed (and which indicators were helpful to guide tailoring of interventions) feels like a separate paper. (If you want to keep all of this in this paper, much of it should go in the methods and the whole paper’s focus should shift – including title, abstract – so that it’s clear that the paper is about designing and monitoring control strategies. Instead, I suggest keeping the focus of the paper as is and collapsing lines 5-41 into one paragraph. Choose 3-4 important points that you think made the interventions effective and describe them succinctly. Don’t use the word “we” to describe who designed the interventions.</p> <p>Page 11, conclusion: Would mention vaccines as part of strategy.</p>
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## VERSION 2 – AUTHOR RESPONSE

S.No	Reviewer	Comments from the reviewer	Reply from the authors	Page & line number
1	Reviewer 3	Page 2, lines 5-6: you don't need to say who implemented (e.g. GCC) until the main text	We thank the reviewer for the suggestion. As suggested, we reframed the sentence after excluding the term "GCC"	p2 - line 5-6
2	Reviewer 3	Page 3, lines 3-5: Not sure you can claim that these strategies controlled COVID-19, just that there was an association. Suggest, "We did a comprehensive analysis of the association between feasible community-centric public health strategies and the spread and impact of COVID-19 over time during an outbreak in a large, densely populated metropolitan city in India."	We thank the reviewer for the suggestion. We reframed the sentence as per the suggestion	p3 - line 3-5
3	Reviewer 3	Page 4, line 2: Define the acronym COVID-19	We agree with the reviewer. We have defined the acronym COVID-19	p4 - line 2
4	Reviewer 3	Page 4, line 5: Change to: "Major outbreaks have been major hubs for outbreaks worldwide, which has posed challenges...."	We thank the reviewer for the suggestion. We reframed the sentence as "Major cities have been major hubs for outbreaks worldwide, which has posed challenges..."	p4 - line 5-6
5	Reviewer 3	Page 4, line 7: Change 'faced' to 'reported'	We agree with the reviewer. We have changed the word "faced" to "reported"	p4 - line 7
6	Reviewer 3	Page 4, line 9: 'Till' is not clear – is it 'to' or 'through' (inclusive or exclusive of May).	We thank the reviewer for the suggestion. We have changed the term "till" to "through" as the given figures were till the end of May	p4 - line 10
7	Reviewer 3	Page 4, line 10: Grammatical construction makes meaning ambiguous; suggest: "The density of population, predominance of inter-generational families, and	We agree with the reviewer. We removed this sentence here and referred it in a later	p4 - line 25-29

		frequent socialising of extended families and friends made it challenging to control transmission.”	paragraph based on comment number 10	
8	Reviewer 3	Page 4, lines 15-17: Suggest “Despite the lockdown, it was difficult to control the spread of COVID-19 in Chennai, the capital city of the southern state of Tamil Nadu.”	We agree with the reviewer. We changed the sentence as suggested	p4 - line 13-15
9	Reviewer 3	Page 4, line 19: Exact numbers are given, so why “about?”	We thank the reviewer for pointing it out. We removed the word "about" from the sentence	p4 - line 17
10	Reviewer 3	Page 4, lines 27-29: You have circled back to comments on cities but the first paragraph of the intro was about this, would consolidate in one place.	We thank the reviewer for the suggestion. As suggested, We have consolidated the points in one place	p4 - line 25-29
11	Reviewer 3	Page 4, line 32: which health workforce? Public health or health care? Both?	We thank the reviewer for the comment. It refers to both public health and healthcare workforce. We have added both to the sentence	p4 - line 33
12	Reviewer 3	Page 4, line 39-41: Again, I do not think you can claim causation. Suggest: “In this paper, we described the public health interventions undertaken to control the COVID-19 epidemic in Chennai, India, from March to October 2020, and examine associations between these interventions and the spread and impact of COVID-19.”	We agree with the reviewer and changed the sentence as per the suggestion	p4 - line 39-42
13	Reviewer 3	Page 4, lines 44-45: Describe GCC (e.g. Public health org? Gov? Private?)	We agree with the reviewer and described GCC. It is the civic (government) body governing Chennai city	p4 - line 46
14	Reviewer 3	Page 5, line 2: one of the most crowded in India? In the world? How do you know? Suggest “a crowded wholesale fruit/vegetable market”	We agree with the reviewer and changed the sentence as per the suggestion	p5 - line 4

15	Reviewer 3	Page 5, line 4: define IT if you use it	We agree with the suggestion. We have expanded the term "IT"	p5 - line 6
16	Reviewer 3	Page 5, lines 14-15: suggest: "The central strategy was to conduct surveillance and testing closer to home, including field-based contact tracing in the streets when a cluster of cases was reported."	We thank the reviewer for the suggestion. We have reframed the sentence as suggested	p5 - line 16-17
17	Reviewer 3	Page 5, lines 20-23: suggest: "All individuals who tested positive for COVID-19 were offered free transport, and free admission if necessary, to Government COVID-19 hospitals and COVID Care Centres (CCC)."	We accept the suggestion from the reviewer. We have reframed the sentence as per the suggestion	p5 - line 24-27
18	Reviewer 3	Page 5, lines 23-25: suggest: "Another innovative strategy was to identify 3500 young adults to be FOCUS (Friends of COVID persons Under Surveillance) volunteers in their own communities."	We thank the reviewer for the suggestion. We have changed the sentence as suggested	p5 - line 27-28
19	Reviewer 3	Page 5, lines 31 and 33: is the state government different than Gol?	Yes, the state government is different from Gol. We have added the name of the state "Tamil Nadu" to avoid confusion	p5 - line 42
20	Reviewer 3	Page 5, lines 38-39: Enforcement of mitigation strategies has been difficult everywhere. Unless you can say that everyone who did not wear a mask correctly was fined, I suggest: "Wearing masks while in public was compulsory since mid-April, and those who did not wear masks appropriately could be fined."	We thank the reviewer for the suggestion. We have changed the sentence as suggested	p5 - line 49-50
21	Reviewer 3	Page 6, line 3: COVID-19 is the disease, not the infection	We agree with the suggestion. We have changed the sentence as "Any individual diagnosed with COVID-19"	p6 - line 14
22	Reviewer 3	Page 6, line 12: so being in the same office room, but for less than	We thank the reviewer for pointing it out. We have	p6 - line 23-24

		15 min or more than 6 feet apart was considered an exposure?	added the time and distance in the sentence	
23	Reviewer 3	Page 6, line 14-15: there was a distinction between mild and very mild? If there was no formal distinction, suggest not using 'mild' and comment applies throughout (including 'very mild symptoms' – just say mild)	We thank the reviewer for the suggestion. We used the same terms given in Guidance document released by the ministry. As per the suggestion, we have removed the word "very" and retained only "mild cases"	p6 - line 27
24	Reviewer 3	Page 6, lines 20-22: Confusing. If alternative causes don't count, delete: "unless there is an alternative cause of death that cannot be related to COVID diseases such as trauma without a period of complete recovery between illness and death." If alternative causes DO count if there hasn't been recovery from covid, you don't want the word 'unless.'	We thank the reviewer for the suggestion. We have split the sentence into two lines, as given in the WHO guidelines for certification of COVID-19 deaths	p6 - line 32-35
25	Reviewer 3	Page 6, line 50. Would say that you then 'stratified' incidence by demographics factors you mention, rather than defining incidence that way. Move all stratification discussing to data analysis.	We thank the reviewer for the suggestion. We have removed the discussion on stratification from outcomes of interest section and moved it to data analysis section	p7 - line 12-13
26	Reviewer 3	Page 7, lines 18-28: this is secondary outcomes of interest, not analytic methods.	We thank the reviewer for the suggestion. We have moved this paragraph to outcomes of interest section	p7 - line 18-28
27	Reviewer 3	Page 7, lines 41-42: why no statistical testing between males and female incidences (you claim males 'higher')?	We thank the reviewer the suggestion. We have added the result of chi square test as per the suggestion  We also assessed the difference in change of incidence over time between males and females. We have mentioned the results of the same in page 9	p 7 - line 37 & p8 - line 7  p9 - line 30-3

28	Reviewer 3	Page 8, line 10: delete “owing to intense lockdown measures.”	We have deleted “owing to intense lockdown measures.” as per the suggestion	p8 - line 23
29	Reviewer 3	Page 8, lines 23-24: Suggest: “incidence increased from 107 per million in April to 1694 per million in May”	We thank the reviewer for the suggestion. As suggested, we have changed the sentence as “incidence increased from 107 per million in April to 1694 per million in May”	p8 - line 37
30	Reviewer 3	Page 8, lines 24-25 and lines 31-32: Put all CFR in one sentence, and not mixed with other indicators (e.g. not in same sentence with incidence of home isolation).	We accept the suggestion from the reviewer. We have put all CFR in one sentence and split the indicators into different sentences	p8 - line 42-44
31	Reviewer 3	Page 8, line 44: Rt was much higher before. Suggest: “The maximum Rt during this period was..”	We accept the suggestion from the reviewer. We have reframed the sentence as per the suggestion	p9 - line 9
32	Reviewer 3	Page 9, line 14-15: what is extended to home contacts ratio?	It was the ratio between number of extended contacts and home contacts. We have reframed the sentence as "In July, the ratio of extended contacts to home contacts was two and increased to three between August and October	p9 - line 25
33	Reviewer 3	Page 9, line 18: don't need to specify that incidence is per million.	We accept the suggestion from the reviewer and changed "incidence per million" to "incidence"	p9 - line 30
34	Reviewer 3	Page 9, lines 20-21: Need to be more specific. How is there one p-value for all ages (which ages are being compared)? Which ages? What are the numbers (both for age and gender).	We have assessed whether the incidence CHANGED over time at different rates between gender and across the five age groups ( $\leq 20$ , 21-40, 41-60, 61-80, $> 80$ ). The numbers are incidence within each gender and age group during each time period. We used Friedman's test to test this difference, the outcome (incidence) being count	

			come repeated over time across different groups	
35	Reviewer 3	Page 9, lines 21-22: delete: "That is, different age groups and gender had different rates of change in incidence." Redundant.	We have deleted the sentence as per the suggestion	p9 - line 33
36	Reviewer 3	Page 9, lines 24-25: how many zones are there in total? Is 8 most of them or a small proportion?	We thank the reviewer for the suggestion. We have reframed the sentence as "The incidence increased above 8800 per million in eight out of 15 zones in all three regions (north, central and south) during July-August"	p9 - line 35-36
37	Reviewer 3	Page 9, lines 32-38: throughout this paragraph, specify which beds you are referring to. First you talk about beds generally (is this public and private? Including ICU?) Then ICU, oxygen – are those CCC? Or from the first totals? Why divide ICU (and no other bed types) by public/private?	We accept the suggestion from the reviewer. We have reframed the paragraph to give finer details on public/private, type of beds. We have given ICU data separately for public and private to show the wide difference between public and private hospitals	p9 - line 43-47
38	Reviewer 3	Page 9, lines 41-42: Suggest discussing association and the possibility of causation: "Our analysis showed that implementation of a combination of interventions was associated with decreasing transmission and may have resulted in a reduction of COVID-19 cases despite easing of restrictions."	We thank the reviewer for the suggestion. We have reframed the sentence as suggested	p10 - line 5-8

39	Reviewer 3	Page 9, lines 43-44: There are congested urban slums in China. Compliance is more complicated than whether the setting is a crowded urban slum or not. Also, this study did not examine compliance rates across countries (or even within India), so I would not focus on that. Suggest something like: "Studies have shown that in China and European countries, lockdown measures led to a decline in cases [21–26]. In India as elsewhere, effective pandemic control required adaptation of mitigation strategies to the local setting, and this was particularly challenging in highly congested urban slums."	We thank the reviewer for the suggestion. We have reframed the sentence as suggested	p10 - line 8-11
40	Reviewer 3	Page 9-11, Discussion: 1) You are missing the main part of the discussion: you need a paragraph that focuses on the main results you have just presented: the association between implementation of strategies and declining indicators, why you think there was an association/potential causation, and similar data from other sites/studies. The content from Page 10, line 43 through page 11, line 12 should be moved up to be with this main part of the discussion.	We thank the reviewer for the suggestion. We have moved the content from page 10 and 11 up to be with the main part of the discussion	p10 - line 19-39
41	Reviewer 3	Page 10, lines 5-41. Up until now, this paper has been an analysis of interventions and COVID-19 indicators. Now you shift to talking about how "we" designed interventions, which is not the focus of the paper. A long discussion of how interventions were designed (and which indicators were helpful to guide tailoring of interventions) feels like a separate paper. (If you want to keep all of this in this paper, much of it should go in the methods and the whole paper's focus should shift – including title, abstract – so that it's clear that the paper is	We thank the reviewer for the suggestion. We have moved the some of the content from the mentioned lines to introduction and methods section. We have retained only the points necessary for discussion as suggested. We wanted to document the strategies designed as well (part of the objective), hence we have retained the same in the discussion.	p4 - line 20-22 p5 - line 18-19 p5 - line 33-40 p10 - line 41-50 p11 - line 1-17

		<p>about designing and monitoring control strategies. Instead, I suggest keeping the focus of the paper as is and collapsing lines 5-41 into one paragraph. Choose 3-4 important points that you think made the interventions effective and describe them succinctly. Don't use the word "we" to describe who designed the interventions.</p>		
42	Reviewer 3	<p>Page 11, conclusion: Would mention vaccines as part of strategy.</p>	<p>We thank the reviewer for the suggestion. We have mentioned about the vaccines in the conclusion as per the suggestion</p>	<p>p11 - line 39-40</p>