

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Effect of covid-19 lockdown on child protection medical assessments: a retrospective observational study in Birmingham, UK
<b>AUTHORS</b>	Garstang, Joanna; Debelle, Geoff; Anand, Indu; Armstrong, Jane; Botcher, Emily; Chaplin, Helen; Hallett, Nutmeg; Morgans, Clare; Price, Malcolm; Tan, Ern Ern Henna; Tudor, Emily; Taylor, Julie

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Dr Peter Green St Georges University Foundation Healthcare Trust UK I know Jo Garstang and Geoff Debelle
<b>REVIEW RETURNED</b>	16-Aug-2020

<b>GENERAL COMMENTS</b>	<p>This is a well crafted rigorous study that is timely and well written up. It asks good questions and has a respectable sample size. There are a few very minor details I would draw to your attention.</p> <p>1) P4 line 8: the phrase "including safeguarding" may be better replaced by "Including child protection". Safeguarding feels tautologous.</p> <p>2) P4 line 13: The sentence starts with "Statutory guidance" but the reference link - 3 on line 16, is to legislation (CA 1989). A choice needs to be made.</p> <p>3) P 10 line 43 refers to the National Safeguarding Children's Panel. It is in fact called the Child Safeguarding Practice Review Panel.</p> <p>4) P 8 line 12: you make a tantalising statement about a significant drop in girl referrals but there is no followup discussion. This is potentially a very interesting observation and while it deserves further attention, it might be better removed and dealt with separately, rather than addressing it now and delay the publication of a very important study. But I cant wait to hear what you might make of this.</p> <p>5) P 8 line 19 The finding that 39% of children were currently or had previously been subject to CPP is not new but I wonder, because of the apparent failure of CPP if a child is later abused, if this too should not be addressed.</p> <p>6) P 9 line 8. As you were running extended hours in 2020 only, is this not a sampling variation that could helpfully be described in the method section?</p>
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	As I say, an excellent paper overall. I hope these comments are helpful.
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<b>REVIEWER</b>	Dr Sunil S Bhopal Newcastle University, UK
<b>REVIEW RETURNED</b>	17-Aug-2020

<b>GENERAL COMMENTS</b>	<p>I congratulate the authors on an important and timely piece of work. The analysis is simple and understandable, the writing is of high quality, and I have very few comments as follows:</p> <p>p5 line 50 - suggest either explain what the 'booking service' is or rephrase</p> <p>p6 line 39 - suggest delete "as this was an observational study" (because sample size calculation appropriate for other types of observational studies) and make a more simple statement that all assessments were included</p> <p>p7 lines 33-38 &amp; p8 lines 41-43: I suggest providing absolute numbers of assessments here</p> <p>p9 line 27 - I suggest softening 'certain' - how about "we can expect"</p> <p>p9 line 42 and throughout - consider altering 'abuse' to 'abuse and neglect' throughout</p> <p>p9 line 45 - suggest new paragraph here (starting "Although UK govt...") and again from "Missed sentinal NAI..." and again from "While UK government policy"</p> <p>p9 line 54 - suggest that to maintain longevity of this article, "mandatory school attendance from September" is altered to make sense to a reader considering the piece in October 2020 or indeed October 2025. How about "to begin in September 2020... it is unclear at the time of writing that this will be enforced..." or similar</p> <p>Suggest new para at "once back at school"</p> <p>p10 line 3-5 - I am a little concerned about the predictions made by the authors re struggling to meet demand. These will very shortly be proven in either direction - and possibly before publication of the article. Do the authors wish to keep them?</p> <p>Suggest new para at "Child abuse carries"</p> <p>It strikes me that another conclusion of this piece is that when schools are closed, the relative importance of hospital doctors, social workers and family members in ensuring children are safe increases (table 1). In future lockdowns, might this be reiterated through - for example - media communications? to hospital A&amp;E departments? Might social-workers be mandated to make weekly face-to-face visits to vulnerable children? These are just ideas for the authors to consider.</p> <p>Future work - would the authors agree that it is surprising that these data must be studied in small local areas, and that a national data collection and analysis system is necessary?</p>
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	<p><b>*Tables &amp; Figures*</b></p> <p>Table 1</p> <p>Can the "all" column be distinguished in some way from the three individual years? Perhaps with a thick dividing line?</p> <p>"n" should be lower case</p> <p>Figure 1</p> <p>This has come through with a red background in my copy. I presume this is a format issue. Suggest changing the easter holiday date colours to something different to the line colours. The figure legend needs more detail explaining what 'week' means, that this refers to CPME, and what 'total' and 'school' means</p> <p>Figure 2</p> <p>The error bars distract from the main message and I'm not convinced that they add sufficiently to the story to warrant this. Suggest removal.</p> <p>The incidence rate ratios compare the combined incidence for 2018 &amp; 2019 against the incidence in 2020. This needs to be made clear in the legend, along with detail as for Figure 1.</p> <p>The incidence rate ratio of 0 in weeks 3/4 and 15/16 are not technically correct and I think distract. Suggest making this line discontinuous and not plotting those fortnight periods. An alternative would be to use crosses to mark the IRR on the other 7 periods.</p> <p>The secondary y-axis appears to be not aligned to the horizontal lines - this should be amended.</p> <p><b>*Data sharing*</b></p> <p>For journal to consider alongside authors - is there is a reason for not including the anonymised data file with the submission/placing in public domain in line with open science principles for reanalysis, even if first-author not contactable as per data sharing statement?</p> <p><b>*References*</b></p> <p>Journal to advise on formatting, e.g 13 appears to need to be reformatted. Is 6 available online?</p>
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**VERSION 1 – AUTHOR RESPONSE**

<b>Reviewer 1 Comments</b>	<b>Response</b>
This is a well crafted rigorous study that is timely and well written up. It asks good questions and has a respectable sample size.	That is very kind, thank you.

P4 line 8: the phrase "including safeguarding" may be better replaced by "Including child protection". Safeguarding feels tautologous.	We agree and have changed to child protection.
P4 line 13: The sentence starts with "Statutory guidance" but the reference link - 3 on line 16, is to legislation (CA 1989). A choice needs to be made.	Good spot. We have changed to legislation.
P 10 line 43 refers to the National Safeguarding Children's Panel. It is in fact called the Child Safeguarding Practice Review Panel.	Quite right, we have amended to Child Safeguarding Practice Review Panel.
P 8 line 12: you make a tantalising statement about a significant drop in girl referrals but there is no followup discussion. This is potentially a very interesting observation and while it deserves further attention, it might be better removed and dealt with separately, rather than addressing it now and delay the publication of a very important study. But I cant wait to hear what you might make of this.	This is very tantalising, yes! However, it was unanticipated and the small numbers may make this statistical artefact. We have added the following sentence to the discussion:  <i>The significant decrease noted in girl referrals may simply be due to small numbers, but warrants further investigation as to whether this trend continues and if so, why?</i>
P 8 line 19 The finding that 39% of children were currently or had previously been subject to CPP is not new but I wonder, because of the apparent failure of CPP if a child is later abused, if this too should not be addressed.	Sentence added to meaning of study in discussion:  <i>It is concerning that 39% of children referred for CPME were either currently or previously subject to CPP, this suggests even if there is a lower threshold for subsequent referral that CPPs are not providing adequate safeguards for vulnerable children.</i>
P 9 line 8. As you were running extended hours in 2020 only, is this not a sampling variation that could helpfully be described in the method section?	We have amended the sample section to say  <i>Data were collected for all CPME for 18-week periods in 2018, 2019 and 2020, from the last week in February, when schools returned following the half-term holiday, to the end of June and noting the variation mid-2020 when extended hours were running.</i>
<b>Reviewer 2 Comments</b>	<b>Response</b>
I congratulate the authors on an important and timely piece of work. The analysis is simple and understandable, the writing is of high quality, and I have very few comments	That is very kind, thank you.
p5 line 50 - suggest either explain what the 'booking service' is or rephrase	This is now clarified under procedure: <i>We obtained a list of all children referred for CPME from the booking service, which is the single point of contact for all CPME referrals in BCHT....</i>
p6 line 39 - suggest delete "as this was an observational study" (because sample size calculation appropriate for other types of observational studies) and make a more simple statement that all assessments were included	Thank you, we have deleted and replaced as advised.
p7 lines 33-38 & p8 lines 41-43: I suggest providing absolute numbers of assessments here	This has been added to the results referral numbers and discussion statement of principle findings: <i>with 78 referrals in 2018, 75 in 2019 and 47 in 2020.</i>
p9 line 27 - I suggest softening 'certain' - how about "we can expect"	We have replaced as advised.
p9 line 42 and throughout - consider altering 'abuse' to 'abuse and neglect' throughout	We have replaced 'abuse' with 'abuse and neglect' in the discussion section

p9 line 45 - suggest new paragraph here (starting "Although UK gov...") and again from "Missed sentinel NAI..." and again from "While UK government policy"	We have made these into two new paragraphs as suggested.
p9 line 54 - suggest that to maintain longevity of this article, "mandatory school attendance from September" is altered to make sense to a reader considering the piece in October 2020 or indeed October 2025. How about "to begin in September 2020... it is unclear at the time of writing that this will be enforced..." or similar	That's an excellent suggestion, thank you. We have amended to future-proof this by saying:  <i>While UK government policy is for mandatory school attendance to begin in September 2020, it is unclear at the timing of writing how this will be implemented. It is vital that this is encouraged and enforced...</i>
Suggest new para at "once back at school"	New para.
p10 line 3-5 - I am a little concerned about the predictions made by the authors re struggling to meet demand. These will very shortly be proven in either direction - and possibly before publication of the article. Do the authors wish to keep them?	We had moderated this with vague 'mays' rather than absolute predictions and are minded to leave this in, although appreciate we may be wrong.
Suggest new para at "Child abuse carries"	New para inserted
It strikes me that another conclusion of this piece is that when schools are closed, the relative importance of hospital doctors, social workers and family members in ensuring children are safe increases (table 1). In future lockdowns, might this be reiterated through - for example - media communications? to hospital A&E departments? Might social-workers be mandated to make weekly face-to-face visits to vulnerable children? These are just ideas for the authors to consider.	We have amended the conclusion to reflect these important points:  <i>If there are further school closures the relative importance of hospital doctors, social workers and family members increases. Media communications could be used with effect to highlight this in hospital emergency departments for example. Mandatory regular visits to vulnerable children could be considered. Perhaps the National Safeguarding Practice Review Panel could take these ideas forward.</i>
Future work - would the authors agree that it is surprising that these data must be studied in small local areas, and that a national data collection and analysis system is necessary?	We have added the following to the conclusion:  <i>It is disappointing that these data need to be studied in local areas, some of which have very small numbers. A national data and analytics system would be very helpful.</i>
Table 1  Can the "all" column be distinguished in some way from the three individual years? Perhaps with a thick dividing line?	We have gone back to the BMJ Open guidelines on tables and have edited the table in line with those. We have not added a dividing line between all and the other columns as this would not be in line with the guidelines, but hopefully the table is now clearer.
"n" should be lower case	We have changed 'n' to lower case.
Figure 1  This has come through with a red background in my copy. I presume this is a format issue. Suggest changing the easter holiday date colours to something different to the line colours. The figure legend needs more detail explaining what 'week' means, that this refers to CPME, and what 'total' and 'school' means	We have changed the formatting of the figures so the red background should no longer be an issue. The Easter holiday date colours are the same as the lines for the corresponding years, which we believe is helpful, however, we are happy to change the colours if it is still a problem. We have added to the legend:  <i>Figure 1. Cumulative weekly CPME referrals by year for all referrals (total) and referrals from schools (school)</i>

	And added the figure legends at the end of the manuscript.
Figure 2  The error bars distract from the main message and I'm not convinced that they add sufficiently to the story to warrant this. Suggest removal.	We have discussed this as a team and our senior statistician emphasises their importance in best statistical reporting. We have therefore left the error bars in, but will defer to editorial decision on this point.
Fig 2 The incidence rate ratios compare the combined incidence for 2018 & 2019 against the incidence in 2020. This needs to be made clear in the legend, along with detail as for Figure 1.	Thank you, this is a good point. We have now included this information in the figure legend:  <u><i>Figure 2. Totals of weekly referrals by year and IRR comparing combined incidence for 2018/19 against 2020 incidence</i></u>  And added the figure legends at the end of the manuscript.
The incidence rate ratio of 0 in weeks 3/4 and 15/16 are not technically correct and I think distract. Suggest making this line discontinuous and not plotting those fortnight periods. An alternative would be to use crosses to mark the IRR on the other 7 periods. The secondary y-axis appears to be not aligned to the horizontal lines - this should be amended.	Having discussed this with our statistician, the IRR of 0 is correct, but we have added the upper error bars to these weeks. We have, however, removed the line as this makes the table less busy. We have removed the horizontal lines from the chart area.
*Data sharing*  For journal to consider alongside authors - is there is a reason for not including the anonymised data file with the submission/placing in public domain in line with open science principles for reanalysis, even if first-author not contactable as per data sharing statement?	The data is available on reasonable request. Even anonymised and disaggregated it is drawn from individual child protection reports within one local authority and we do not think we can place this in the public domain at this time.
*References*  Journal to advise on formatting, e.g 13 appears to need to be reformatted. Is 6 available online?	We have checked and corrected all references.  13 is the citation given at the doi. <b>Citation:</b> The <i>PLOS Medicine</i> Editors (2014) Observational Studies: Getting Clear about Transparency. PLoS Med 11(8): e1001711. <a href="https://doi.org/10.1371/journal.pmed.1001711">https://doi.org/10.1371/journal.pmed.1001711</a>
<b>Formatting</b>	<b>Response</b>
Authors order mismatch: - Kindly ensure that the arrangements of authors in your main document and ScholarOne submission system are the same.	User error – now matched.
Figure resolution: - Please re-upload your figure in 300 dpi and 90mm x 90mm of width. Please see the following link for further details on preparing images for submission:	Figures formatted, now 300 dpi and 90mm width.

<a href="https://authors.bmj.com/writing-and-formatting/formatting-your-paper/">https://authors.bmj.com/writing-and-formatting/formatting-your-paper/</a>	
Table not embedded: - Kindly embed your tables (should be editable and in table tools format). Tables should be placed in the main text where the table is first cited. Tables must be cited in the main text in numerical order. Please note that tables embedded as Excel files within the manuscript are NOT accepted. Do not upload your table separately.	All tables editable, embedded and in numerical order.
Supplementary Table 1 citation missing: - The in-text citation for "Supplementary Table 1" is missing in the main text of your main document file. Please amend accordingly.	This is cited on page 5 in the procedure paragraph <i>We read the reports, and completed an anonymised data extraction form for each CPME (on-line supplementary table 1).</i>

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Peter Green St Georges University Hospital UK I know two of the authors
<b>REVIEW RETURNED</b>	01-Sep-2020

<b>GENERAL COMMENTS</b>	Well done. More to follow I hope!
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<b>REVIEWER</b>	Sunil Bhopal Newcastle University
<b>REVIEW RETURNED</b>	26-Aug-2020

<b>GENERAL COMMENTS</b>	<p>Thank you for addressing the comments very clearly. I have recommended acceptance from my point of view, but do have a couple of small responses around the two Figures which I will leave to the editors to deal with - possibly with a statistical reviewer if needed - as follows:</p> <ol style="list-style-type: none"> <li>1. The red background to the figures makes it difficult to read but I presume this is a formatting issue and it will be white in the final publication</li> <li>2. If the error bars are staying in Figure 2, I would suggest that they should be explained (are they 95% CIs?) in the legend</li> <li>3. I am still unclear for the rationale in displaying a ratio when the denominator is zero (Figure 2: weeks 3/4 &amp; 15/16) and 3b) what do the error bars/95% CIs mean for these week-pairs?</li> </ol> <p>Congratulations to the team.</p>
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