PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	The role of pre-existing adversity and child maltreatment on mental health outcomes for children involved in child protection: a population-based data linkage study
AUTHORS	Maclean, Miriam; Sims, Scott; O'Donnell, Melissa

VERSION 1 - REVIEW

REVIEWER	Mary Cannon Royal College of Surgeons in Ireland
REVIEW RETURNED	05-Mar-2019

GENERAL COMMENTS	Firstly, I think it is such an important paper and needs to be published. The mental health needs of children within the child welfare system are, as I understand it, often overlooked and not prioritized in any meaningful way. This study confirms the level of risk for poor outcomes that come both with the presence of substantiated abuse/welfare issues and institutional care and with the myriad of other risk factors that young people in the care system are likely to have (i.e. living in poverty, poor maternal mental ill-health, etc.). Notwithstanding the inevitable limitations of using national database records to try to extract reliable exposures and outcomes (which the authors acknowledge), the methods are so clearly articulated and the authors have been able to examine really important associations between a broad range of exposures and outcomes, some of which do not appear to have been reported on previously (e.g. personality disorders as an outcome). I think the paper could be published as is. I have no major criticisms of it, bar a few minor grammatical issues (commas etc.) that an editor will rectify. However, the following are things that I think would enhance the paper somewhat: - Table 1 is very busy and I don't know if the dark black lines around some of the cells is intentional (why, if so?) or an artefact of the PDF process - Table 2 needs a footnote, indicating the variables included in the multivariate analysis as this is unclear (as, in the methods section, they note only categories of co-variates and do not specify in details what variables they entered into as covariates in the analysis). - I wonder about the emphasis often given to the univariate findings in the Findings section as I think that the multivariate

	findings offer a truer reflection of the multi-factorial risk factors that young people within the child welfare system have. - A finding that does not feature in the discussion is the one where "The average time from first substantiation to any mental health event was similar at 64 months for all children and 66.5 months for those who entered out-of-home care". Regardless of whether or not maltreatment occurred prior to mental health issues for young people, given the other findings in this study and the clear risks associated with entry into the child welfare system, it is quite disheartening to think that the average time to access services for children in the system is over 5 years. I would love the authors to comment on this in their discussion as I think it may well reflect a failure to recognize and respond to mental ill-health among children in the care system rather than a late onset of mental ill-health among those children.

REVIEWER	Nina Biehal University of York England
REVIEW RETURNED	08-Mar-2019

GENERAL COMMENTS	This is an excellent paper addressing an important research question. It is well-written and for the most part the results are clearly presented. However the discussion of results presented in Table 3 needs some clarification. It is not entirely clear whether the diagnoses refer to the children's mental health or their mothers', as many of the children would be too young to have a diagnosis of Adult Personality Disorder. This issue needs to be clarified both in the table heading and in the text. If this table refers to the children's mental health , surely many children born in the 2000s will be missing as they will be too young at the time of the study to have to have a diagnosis Adult Personality Disorder? This should be noted as it may lead to an underestimate of the true proportion with this diagnosis. Also, results on the critical issue of whether the recorded maltreatment pre-dated the child's mental health difficulties receives only a brief mention on p.15. Could this aspect of the analysis be dealt with more comprehensively?

VERSION 1 – AUTHOR RESPONSE

	Reviewer comments	Author reply
	Reviewer 1	
Q1.1	Table 1 is very busy and I don't know if the dark black lines around some of the cells is intentional (why, if so?) or an artefact of the PDF process.	Thank you, this wasn't our intention and believe it may have occurred during the PDF process. Tables 1-4 have been reformatted to remove cell borders. Minor edits to variable names for consistency.

Q1.2	Table 2 needs a footnote, indicating the variables included in the multivariate analysis as this is unclear (as, in the methods section, they note only categories of co-variates and do not specify in details what variables they entered into as covariates in the analysis).	Footnote added to Table 2.
Q1.3	I wonder about the emphasis often given to the univariate findings in the Findings section as I think that the multivariate findings offer a truer reflection of the multi-factorial risk factors that young people within the child welfare system have.	We tried to offer a balance between univariate and multivariate results in our discussion of findings and presentation of results, first by describing the univariate effects, and then how these are attenuated in the multivariate models. We agree that multivariate findings offer a truer reflection of the multi-factorial risk factors, but we believe it is worthwhile presenting unadjusted estimates to provide a contrast to the multivariate estimates and show the impact that adjusting for confounding effects has on risk factors of interest. It also shows what covariates had the strongest correlations with the outcome variables prior to the full model.
Q1.4	A finding that does not feature in the discussion is the one where "The average time from first substantiation to any mental health event was similar at 64 months for all children and 66.5 months for those who entered out-of-home care". Regardless of whether or not maltreatment occurred prior to mental health issues for young people, given the other findings in this study and the clear risks associated with entry into the child welfare system, it is quite disheartening to think that the average time to access services for children in the system is over 5 years. I would love the authors to comment on this in their discussion as I think it may well reflect a failure to recognize and respond to mental ill-health among children in the care	We have included further comment on this issue into the discussion section on page 17. Our findings highlight a failure in the responsiveness of the child protection system as a whole to assist children with mental health issues, especially as evidenced by an average time of 5 years between a child's first maltreatment substantiation and access to a service. We acknowledge though that children may be involved in child protection at a young age and therefore mental health issues may take time to appear. However, we would argue that given the trauma and adverse social circumstances these children experience, mental service provision should be addressed and seen as a priority, and this
	system rather than a late onset of mental ill-health among those children.	may be an opportunity to provide earlier interventions for better outcomes.
	Reviewer 2	

Q2.1	The discussion of results presented in Table 3 needs some clarification. It is not entirely clear whether the diagnoses refer to the children's mental health or their mothers', as many of the children would be too young to have a diagnosis of Adult Personality Disorder. This issue needs to be clarified both in the table heading and in the text. If this table refers to the children's mental health , surely many children born in the 2000s will be missing as they will be too young at the time of the study to have to have a diagnosis Adult Personality Disorder? This should be noted as it may lead to an underestimate of the true proportion with this diagnosis.	The diagnosis outcomes refer to the children's mental health. ICD-10 use this diagnostic name as a grouping, but this includes childhood, adolescence or adulthood. We agree this ads confusion in the context of our study and so have renamed the diagnosis category to "personality disorder" to avoid confusion. We have also clarified this in the table 3 heading and any previous reference within the manuscript.
Q2.2	Results on the critical issue of whether the recorded maltreatment pre-dated the child's mental health difficulties receives only a brief mention on p.15. Could this aspect of the analysis be dealt with more comprehensively?	Thank you for highlighting this, we have included further comment on this issue in the discussion section on page 17, where we have addressed a similar query made by reviewer 1.