

PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Asylum seeking children and adolescents in Australian immigration detention on Nauru: a longitudinal cohort study.
AUTHORS	Zwi, Karen; Sealy, Louise; Samir, Nora; Hu, Nan; Rostami, Reza; Agrawal, Rishi; Cherian, Sarah; Coleman, Jacinta; Francis, Josh; Gunasekera, Hasantha; Isaacs, David; Larcombe, Penny; Levitt, David; Mares, Sarah; Mutch, Raewyn; Newman, Louise; Raman, Shanti; Young, Helen; Norwood, Christy; Lingam, Raghu

VERSION 1 – REVIEW

REVIEWER	Reviewer name: Anders Hjern Institution and Country: Karolinska Institutet, Sweden Competing interests: I have no competing interests.
REVIEW RETURNED	06-Dec-2019

GENERAL COMMENTS	This is an acceptable description of planned longitudinal study. The study in itself is important. One minor thing could weää be updated before this article is published: 1. Language barriers can be expected to be a major challenge in the early stages of this project, including the acquisition of an informed consent from the participants. How will the study deal with this?
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REVIEWER	Reviewer name: Nick Spencer Institution and Country: Warwick Medical School, UK Competing interests: Karen Zwi and Shanti Raman are colleagues of mine in the International Society for Social Pediatrics and Child Health (ISSOP). I was external examiner of Karen Zwi's PhD thesis
REVIEW RETURNED	02-Jan-2020

GENERAL COMMENTS	<p>The longitudinal study proposed in this protocol will provide invaluable data on the impact of detention on the physical and mental health of asylum-seeking children and adolescents. It is testament to the excellent work already undertaken by the Australian Refugee Child Health Network (ARCH) that now allows them to plan a uniquely valuable research project.</p> <p>The research proposal is generally robust and appropriately designed to achieve its objectives; however, I have some suggestions which I think will strengthen the proposal:</p> <ol style="list-style-type: none">1. The introduction briefly mentions the international literature to which the lead author and others of the authors have contributed. In order to justify the plan for a longitudinal study of this complexity with its associated costs, the authors need to give a more detailed account of the gaps in the literature. Perhaps a box highlighting the gaps would give the reader a clearer understanding of the limitations of current knowledge that the study hopes to address2. The cohort to be studied are all children and adolescents who have experienced detention. As the authors report, children coming
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	<p>into Australia through the formal, recognised route are treated very differently. Karen Zwi and other colleagues have published research on these settled children. Adding a cohort of settled children would enable the authors to compare long-term outcomes of detained versus settled children measured over the same time period. The logistics of this may be challenging but I think the added value would be considerable</p> <p>3. If available, data on parental education/occupation in country of origin would add to demographics</p> <p>4. The various ACE measures are appropriate but I have a concern that these measures focus on abusive relationships within the household to exclusion of factors such as household income, financial hardship and debt which frequently underpin these dysfunctions. Explicit inclusion of these factors would be important along with time variant data on parental/carer employment</p> <p>5. Parental/carer physical and mental wellbeing is also likely to impact the wellbeing and development of the children and should be explicitly included in the list of family variables to be collected</p> <p>6. Cohort children are likely to have been, and continue to be, exposed to a range of interventions following arrival in mainland Australia. If there is evidence of exposure to different interventions, it is important to include this as a potential independent variable affecting outcome</p> <p>7. The children will be enrolled in school but there is no reference to schooling in the proposal.</p> <p>8. Given the many variables which might affect the outcome for these children, I suggest the proposal might include a theoretical/hypothetical Structural Equation Model giving the reader a clearer idea of the possible relationship of these variables to the outcomes.</p> <p>9. The authors state that the ARCH network covers the whole of Australia so I was surprised that the authors are all Sydney and NSW based. Does this mean only those children living in NSW will be included in the cohort?</p> <p>In summary, this is an important proposal for a study which has the potential to make a major contribution to knowledge. While I recognise that some of my suggested additions will be challenging, I think they will further strengthen this project.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

This is an acceptable description of planned longitudinal study. The study in itself is important.

One minor thing could be updated before this article is published:

1. Language barriers can be expected to be a major challenge in the early stages of this project, including the acquisition of an informed consent from the participants. How will the study deal with this?

Thank you – we agree. A qualified health care interpreter using participants' preferred language will be used to promote informed consent and during consultations. Additional comments about informed consent have also been added to the text (see Track Changes).

Reviewer: 2

The longitudinal study proposed in this protocol will provide invaluable data on the impact of detention on the physical and mental health of asylum-seeking children and adolescents. It is testament to the excellent work already undertaken by the Australian Refugee Child Health Network (ARCH) that now allows them to plan a uniquely valuable research project.

The research proposal is generally robust and appropriately designed to achieve its objectives; however, I have some suggestions which I think will strengthen the proposal:

1. The introduction briefly mentions the international literature to which the lead author and others of the authors have contributed. In order to justify the plan for a longitudinal study of this complexity with its associated costs, the authors need to give a more detailed account of the gaps in the literature. Perhaps a box highlighting the gaps would give the reader a clearer understanding of the limitations of current knowledge that the study hopes to address

Thank you for this suggestion. We have included in the Background far more detail on the gaps in the literature and this a rationale for undertaking this complex study.

2. The cohort to be studied are all children and adolescents who have experienced detention. As the authors report, children coming into Australia through the formal, recognised route are treated very differently. Karen Zwi and other colleagues have published research on these settled children. Adding a cohort of settled children would enable the authors to compare long-term outcomes of detained versus settled children measured over the same time period. The logistics of this may be challenging but I think the added value would be considerable.

The addition of an additional cohort of comparison children resettled without being detained on Nauru would be highly informative and would reduce bias but would be prohibitively expensive. There are currently several longitudinal studies of resettled Australian refugee children who have not been detained. We feel it would be more appropriate to compare with the detained children within recent past or existing cohorts. We have selected measures that have been/are being used in these cohorts (such as the SDQ) specifically for comparative purposes.

To address your concern, we have added a paragraph addressing the inclusion of a control group in a newly created Methodological considerations section, as suggested by one of the Editors.

3. If available, data on parental education/occupation in country of origin would add to demographics

This is being collected but has now been included under the Demographics section to make this more explicit.

4. The various ACE measures are appropriate but I have a concern that these measures focus on abusive relationships within the household to exclusion of factors such as household income, financial hardship and debt which frequently underpin these dysfunctions. Explicit inclusion of these factors would be important along with time variant data on parental/carer employment

We agree and had already included similar questions in other parts of the survey that address parent/carer employment (in country of origin and Australia) and financial hardship as a barrier to accessing healthcare. This has been added to the text to make this more explicit.

Whilst household income and debt have not been included, we agree they would be useful data to collect. On balance we have decided not to add this given the time it will take clinicians to complete, the privacy of participants and the requirement for an ethics amendment.

5. Parental/carer physical and mental wellbeing is also likely to impact the wellbeing and development of the children and should be explicitly included in the list of family variables to be collected

This is being collected but has now been included under the Demographics section to make this more explicit.

6. Cohort children are likely to have been, and continue to be, exposed to a range of interventions following arrival in mainland Australia. If there is evidence of exposure to different interventions, it is important to include this as a potential independent variable affecting outcome

We support that children access medical care, counselling and services that address the social determinants of health. In order to measure these interventions and their potential impact on health and wellbeing outcomes, we collect detailed data on interventions conducted at each study contact. Data analysis will attempt to assess the extent to which these affect health and wellbeing outcomes. We have added this text to the article.

7. The children will be enrolled in school but there is no reference to schooling in the proposal.

Access to schooling is important and is addressed in that the R-ACE documents interrupted education (which has been added to the text) and the Pervasive Refusal Syndrome tool documents school refusal.

8. Given the many variables which might affect the outcome for these children, I suggest the proposal might include a theoretical/hypothetical Structural Equation Model giving the reader a clearer idea of the possible relationship of these variables to the outcomes.

Thank you. We have addressed this below.

This text has been added: "Descriptive analyses will be undertaken to summarise means, variances, and distributions of risk and protective factors at baseline and follow-up. Causal models will be developed to consider the complex relationships to physical and mental health outcomes. Structural equation modelling will be used to explore the causal relationships between predictors, mediational factors, and outcomes (e.g. mental health problems). Latent growth curve analysis will be utilised to examine the pattern of change in these outcomes over time."

9. The authors state that the ARCH network covers the whole of Australia so I was surprised that the authors are all Sydney and NSW based. Does this mean only those children living in NSW will be included in the cohort?

The ARCH network covers the whole of Australia and study authors include at least the lead clinician at each of the 11 sites across the country. Children will be recruited from all 11 sites. Clinicians who are not included as co-authors have been acknowledged in the acknowledgements section. Potentially causing confusion is that the core study team are all Sydney based. This team will be responsible for collating, analysing and writing up the data and then consulting with the rest of the author group. This has been included in the text to clarify.

In summary, this is an important proposal for a study which has the potential to make a major contribution to knowledge. While I recognise that some of my suggested additions will be challenging, I think they will further strengthen this project.

VERSION 2 – REVIEW

REVIEWER	Reviewer name: Prof Nick Spencer Institution and Country: Warwick Medical School, UK Competing interests: The lead author and I are both members of the International Society for Social Pediatrics and Child Health and I external examiner for her PhD
REVIEW RETURNED	18-Feb-2020
GENERAL COMMENTS	The authors have responded appropriately to the comments/suggestions in my review and I now think the paper is ready for publication