

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Preterm birth among Pacific Islander women and related perinatal outcomes: a scoping review protocol
<b>AUTHORS</b>	Wu, Bohao; Arslanian, Kendall; Nyhan, Kate; Taylor, Sarah; Shabanova, Veronika; Muasau-Howard, Bethel; Hawley, NL

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Burger, H University of Groningen
<b>REVIEW RETURNED</b>	15-Mar-2021

<b>GENERAL COMMENTS</b>	<p>Review Preterm birth among Pacific Islander women and related perinatal outcomes: a scoping review protocol</p> <p>This is a protocol paper for a scoping review about the occurrence, risk factors and outcomes of preterm birth in the Pacific. In my view the protocol is solid, the topic may have high public health impact and is well written.</p> <p>I have some minor comments which may be helpful in improving this protocol manuscript.</p> <p><b>Introduction</b> Although the authors rightfully state that preterm birth is a cause of mortality, there is a range of associated long term physical morbidities in addition to “cognitive impairments, impaired learning ability, and challenges with executive function”, notably ischaemic heart disease.</p> <p>The authors write “Common risk factors for preterm birth include maternal demographic characteristics, pregnancy history, nutritional status (both pre-pregnancy and inter-pregnancy), present pregnancy characteristics, psychological characteristics, smoking, infection, uterine contractions, and cervical length. “In this list, the terms “present pregnancy characteristics, psychological characteristics” may be specified, e.g. depressive or anxious symptoms.</p> <p>“The preterm birth rate in the US was 9.6%”. Could the authors add an uncertainty interval here just as for the other rate estimates?</p> <p><b>Objectives</b></p> <p>Aim 2 reads “To identify risk factors for preterm birth among Pacific Islander women. “. I assume that additionally risk factors linked to</p>
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	<p>the unborn child may be of interest as well, e.g. congenital abnormalities, multiple gestation.</p> <p>Aim 3. Is there a limit to long-term, e.g. young adulthood or do the authors mean life long?</p> <p>Aim5. The authors may align with an existing scoping review on interventions for bringing back preterm birth the Pacific by Wilson et al. Improving the quality of maternal and newborn care in the Pacific region: A scoping review. Lancet Regional Health Sept. 2020. DOI:<a href="https://doi.org/10.1016/j.lanwpc.2020.100028">https://doi.org/10.1016/j.lanwpc.2020.100028</a></p> <p>As an addition to the 6 aims listed the investigators may consider to research whether the associations under study are different between those living in the US, the US Affiliated Pacific Islands (USAPIs) or the wider Pacific region at the time of pregnancy/birth. The (socio-economic) circumstances of the women may be relevant.</p>
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<b>REVIEWER</b>	Yan, Jianying Affiliated Hospital of Fujian Medical University, Obstetric
<b>REVIEW RETURNED</b>	10-Aug-2021

<b>GENERAL COMMENTS</b>	<p>The purpose of this scoping review is to understand knowledge gaps about preterm birth and relevant perinatal outcomes among Pacific Islander women and their infants.</p> <p>1. The upper limit of the definition of preterm birth is consistent worldwide but the lower limit is set at different gestational weeks, and if the definition of preterm birth is not clear, the results should probably be county statistics.</p> <p>2. Although persons in the Pacific Islander have different rates of risk associated with preterm birth, such as increased risk of obesity, which may contribute to differences in preterm birth. However, regional health care resources are also a key factor in maternal pregnancy outcomes associated with preterm birth, and whether regional differences in health care resources should be taken into account.</p>
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### VERSION 1 – AUTHOR RESPONSE

Reviewer 1 Comments  
Dr. H Burger, University of Groningen

Comments to the Author:

This is a protocol paper for a scoping review about the occurrence, risk factors and outcomes of preterm birth in the Pacific. In my view the protocol is solid, the topic may have high public health impact and is well written.

I have some minor comments which may be helpful in improving this protocol manuscript.

Introduction

Although the authors rightfully state that preterm birth is a cause of mortality, there is a range of associated long term physical morbidities in addition to “cognitive impairments, impaired learning ability, and challenges with executive function”, notably ischaemic heart disease.

Author response:

Thanks for the comment. We added a new reference in our BACKGROUND section in the “Long term consequences...” sentence to tell the importance of the association between preterm birth and physical outcomes.

The authors write “Common risk factors for preterm birth include maternal demographic characteristics, pregnancy history, nutritional status (both pre-pregnancy and inter-pregnancy), present pregnancy characteristics, psychological characteristics, smoking, infection, uterine contractions, and cervical length. “In this list, the terms “present pregnancy characteristics, psychological characteristics” may be specified, e.g. depressive or anxious symptoms.

Author response:

Thanks for the suggestion. We specified present pregnancy characteristics and psychological characteristics in the text.

“The preterm birth rate in the US was 9.6%”. Could the authors add an uncertainty interval here just as for the other rate estimates?

Author response:

Thanks for the comment. We checked the report from the WHO, the uncertainty interval for the preterm birth rate in the US was not reported<sup>1</sup>. We specified it in the text accordingly.

Objectives

Aim 2 reads “To identify risk factors for preterm birth among Pacific Islander women. “. I assume that additionally risk factors linked to the unborn child may be of interest as well, e.g. congenital abnormalities, multiple gestation.

Author response:

Thanks for your suggestion. We have added the example of congenital abnormalities to the main text since we are considering congenital abnormalities as one of the neonatal outcomes of interest. For this review we are excluding studies focused on multiple gestation as an outcome (because of the reverse causation between preterm birth and multiple gestation that can be difficult to disentangle) and studies that report infant outcomes after multiple gestation.

Aim 3. Is there a limit to long-term, e.g. young adulthood or do the authors mean life long?

Author response:

Thanks for the question. At this stage, we could not assume the age scale of the long-term consequences. We will include articles reported lifelong outcomes of preterm birth among Pacific Islanders, if there is any.

Aim5. The authors may align with an existing scoping review on interventions for bringing back preterm birth the Pacific by Wilson et al. Improving the quality of maternal and newborn care in the Pacific region: A scoping review. Lancet Regional Health Sept. 2020.

DOI:<https://doi.org/10.1016/j.lanwpc.2020.100028>

Author response:

We are familiar with this paper and appreciate the suggestion that the two scoping reviews could be aligned. We now write in our “Presentation of Findings” section that we will use a similar approach to

reporting intervention studies as Wilson et al. employed and will describe the components of each intervention using the same WHO care improvement framework. We appreciated this suggestion!

As an addition to the 6 aims listed the investigators may consider to research whether the associations under study are different between those living in the US, the US Affiliated Pacific Islands (USAPIs) or the wider Pacific region at the time of pregnancy/birth. The (socio-economic) circumstances of the women may be relevant.

Author response:

Thanks for your valuable suggestion. We also agree this is an important aim and added it in the OBJECTIVE.

Reviewer 2 Comments

Dr. Jianying Yan, Affiliated Hospital of Fujian Medical University

Comments to the Author:

The purpose of this scoping review is to understand knowledge gaps about preterm birth and relevant perinatal outcomes among Pacific Islander women and their infants.

1. The upper limit of the definition of preterm birth is consistent worldwide but the lower limit is set at different gestational weeks, and if the definition of preterm birth is not clear, the results should probably be county statistics.

Author response:

Thanks so much for your suggestion. We will collect the information of the definition of preterm birth, gestational age scale, and the gestational age measurement method in each final included article. We revised our table 4 accordingly.

2. Although persons in the Pacific Islander have different rates of risk associated with preterm birth, such as increased risk of obesity, which may contribute to differences in preterm birth. However, regional health care resources are also a key factor in maternal pregnancy outcomes associated with preterm birth, and whether regional differences in health care resources should be taken into account.

Author response:

Thank you for another excellent suggestion. As we have now added to Table 4, we will record any information provided by study authors about health system characteristics as well as setting or country-level economic development indicators. We agree that this will be important context as we attempt to summarize our findings.

Reviewer: 1

Competing interests of Reviewer: None declared

Reviewer: 2

Competing interests of Reviewer: I declare there not any potentially conflicting or competing interests.

References:

1. Chawanpaiboon S, Vogel JP, Moller A-B, et al. Global, regional, and national estimates of levels of preterm birth in 2014: a systematic review and modelling analysis. *Lancet Glob Health* 2019;7(1):e37-e46.