

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Cohort Profile: The Health of Philippine Emigrants Study (HoPES) to examine the health impacts of international migration from the Philippines to the United States
AUTHORS	de Castro, A.; Hing, Anna; Lee, Nanette; Kabamalan, Maria; Llave, Karen; Crespi, Catherine M.; Wang, May; Gee, Gilbert

VERSION 1 – REVIEW

REVIEWER	Oyinlola Oyebode University of Warwick, UK
REVIEW RETURNED	07-Aug-2019

GENERAL COMMENTS	<p>This looks like really interesting and useful data. Reading this from the perspective of someone who might want to apply to use the data in the future, the following were questions I had.</p> <ol style="list-style-type: none">1. Add a paragraph on ethics, particularly on the data sharing element of the consent (what have the participants agreed to specifically).2. Can you give us an overview of the reasons for migration and the destinations of the migrant participants in the study?3. Can you add the questionnaire as supplementary material4. Can you give some indication of which questions you have the lowest response rates for- for example, did everyone consent to the objective data collection (usually where we see the lowest response rates) what about the questions on personal income? It would be good to know what the lowest response rates are (or be reassured that responses across all measures is high). <p>The abstract was missing important information. I think you should include in the abstract the fact that the 832 migrant cohort is only 30% of the eligible sample, so potential selection bias is obvious upfront. In findings-to-date I think you need to say "compared with non-migrants" as it isn't clear that you don't mean "compared with native populations in the new country". The future plans are very unclear.</p> <p>Other points: In Table 3 it is apparent that the migrant group have bigger hips and hence a lower waist to hip ratio (rather than smaller waists). I think this needs to be noted in the "findings to date" since I am not so sure it definitely suggests less morbidity? (unless you know better?).</p> <p>In your introduction on page 5 I think it would have been helpful for you to use our review when discussing the hypotheses about migrant weight eg: that genetic and epigenetic factors, stress and</p>
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	<p>socio-economic status are likely to play a role in weight gain in migrant groups. Dietary behaviour and physical activity behaviour appear better than native population in the new country so don't explain the relative increase in weight gain (which is ultimately higher than 'native populations' in high income countries). You can find it here: https://www.ncbi.nlm.nih.gov/pubmed/28755178</p> <p>Very minor: "Matched" twice in a strength and limitation sentence. "countries" missing from the sentence on line 6 16 of the introduction. I think it should say "up to three year SO FAR" in the cohort description 5th line. "fewer" depressive symptoms (not less) in Findings to date on page 10. "return" not "return back" on page 13, second line.</p>
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REVIEWER	Daniel Boateng UMCU, Utrecht University, The Netherlands
REVIEW RETURNED	14-Aug-2019

GENERAL COMMENTS	<p>Thank you for putting together this study which attempts to test the healthy migrant effect. However, I have doubts about the choice of the study population and how this could help reach the project goals.</p> <p>Major Comments:</p> <ol style="list-style-type: none"> 1. In the abstract, please address how the findings would be relevant to the migrant and the home country populations 2. The effect of migration on health is known to depend on length of stay in high income countries. The effect this study is looking at might be realized over a longer period than anticipated, by then many of the migrants would have been lost to follow up. How do you intend to deal with this? 3. Acculturation to a new host environment takes some time and dependent on many factors, both individual and contextual. The role of acculturation in CVDs has been suggested. Further, dietary changes might not happen in a short while as migrants are found to still keep aspects of thier traditional foods especially newly arrived migrants. How will 36 months of follow up allow for all these changes? 4.The study did not mention ethical approval 5. The methods should provide more details on how the measures would be obtained <p>Minor comments</p> <ol style="list-style-type: none"> 1. In the summary of strengths and limitations please revise the statements to be much clearer 2. Line 14-22 is unclear 3. Although this study is quite different from studies that recruited participants (migrants) in the host country, the discussion of this study could be enriched by literature from studies like the RODAM which has extensively looked at health differences between migrants and the host counties
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Oyinlola Oyeboade

Institution and Country: University of Warwick, UK Please state any competing interests or state 'None declared': None declared

This looks like really interesting and useful data. Reading this from the perspective of someone who might want to apply to use the data in the future, the following were questions I had.

RESPONSE: Thank you for the kind words about our research project.

1. Add a paragraph on ethics, particularly on the data sharing element of the consent (what have the participants agreed to specifically).

RESPONSE: The consent form did not explicitly state that data would be shared. However, it did assure participants that their participation would be kept confidential; and that data would be de-identified and only reported in aggregate. Participants were also granted a certificate of confidentiality via the U.S. National Institutes of Health. Text has been added to explain this.

2. Can you give us an overview of the reasons for migration and the destinations of the migrant participants in the study?

RESPONSE: We add text to explain that the principal reasons for migrants to emigrate to the U.S. were to join family members already in the U.S. (n=770) and for employment (n=62); and that top states migrants moved to California, Texas, Washington, Hawaii, Florida, and Nevada.

3. Can you add the questionnaire as supplementary material

RESPONSE: For those interested in utilizing the HoPES data, a request for the questionnaire can be made to the co-principal investigators. This has been added in the Further Details section.

4. Can you give some indication of which questions you have the lowest response rates for- for example, did everyone consent to the objective data collection (usually where we see the lowest response rates) what about the questions on personal income? It would be good to know what the lowest response rates are (or be reassured that responses across all measures is high).

RESPONSE: The response rate for the vast majority of survey items was 100% (including for income), with just a few items nearly 100%. For objective (biological marker) measures, data was collected from over 96% of participants.

The abstract was missing important information. I think you should include in the abstract the fact that the 832 migrant cohort is only 30% of the eligible sample, so potential selection bias is obvious upfront.

RESPONSE: Percent of eligible individuals are included in the abstract for both the migrant and non-migrant cohorts.

In findings-to-date I think you need to say "compared with non-migrants" as it isn't clear that you don't mean "compared with native populations in the new country".

RESPONSE: Done.

The future plans are very unclear.

RESPONSE: Text has been added to clarify.

Other points:

In Table 3 it is apparent that the migrant group have bigger hips and hence a lower waist to hip ratio (rather than smaller waists). I think this needs to be noted in the "findings to date" since I am not so sure it definitely suggests less morbidity? (unless you know better?).

RESPONSE: We revised the text to note that migrants (compared to non-migrants) have significantly larger hip circumference and lower waist-to-hip ratio, as well as significantly higher mean systolic blood pressure and higher mean ApoB level.

In your introduction on page 5 I think it would have been helpful for you to use our review when discussing the hypotheses about migrant weight eg: that genetic and epigenetic factors, stress and

socio-economic status are likely to play a role in weight gain in migrant groups. Dietary behaviour and physical activity behaviour appear better than native population in the new country so don't explain the relative increase in weight gain (which is ultimately higher than 'native populations' in high income countries). You can find it here: <https://www.ncbi.nlm.nih.gov/pubmed/28755178>

RESPONSE: Thank you for this suggestion. We added this citation to reference the sentence that mentions stress, socioeconomic status, and discrimination. We also added a sentence, citing this reference, about epigenetics and physical activity as possible determinants of weight gain among immigrant populations.

Very minor:

"Matched" twice in a strength and limitation sentence.

RESPONSE: Deleted the first "matched."

"countries" missing from the sentence on line 6 16 of the introduction.

RESPONSE: Corrected.

I think it should say "up to three year SO FAR" in the cohort description 5th line.

RESPONSE: Actually, the three year follow up period has not yet been reached. This paper reports only results from the baseline data collection wave; hence no data yet available for the planned total longitudinal follow-up period. Slight revision to the sentence was made to more explicitly communicate this.

"fewer" depressive symptoms (not less) in Findings to date on page 10.

RESPONSE: Change made as suggested.

"return" not "return back" on page 13, second line.

RESPONSE: Change made as suggested.

Reviewer: 2

Reviewer Name: Daniel Boateng

Institution and Country: UMCU, Utrecht University, The Netherlands Please state any competing interests or state 'None declared': No competing interest

Thank you for putting together this study which attempts to test the healthy migrant effect. However, I have doubts about the choice of the study population and how this could help reach the project goals. Major Comments:

1. In the abstract, please address how the findings would be relevant to the migrant and the home country populations

RESPONSE: Text was added to the abstract to mention that baseline results offer insight into health status of both migrant and non-migrant populations. We also point out that findings from future longitudinal analyses can inform the need and design of health-related/relevant interventions.

2. The effect of migration on health is known to depend on length of stay in high income countries. The effect this study is looking at might be realized over a longer period than anticipated, by then many of the migrants would have been lost to follow up. How do you intend to deal with this?

RESPONSE: Ideally, the study would last for more than 3 years, but we are limited by funding. We are in the process of applying for additional funding to extend the study duration. Attrition is certainly a concern, but HoPES has an extensive plan for minimizing it through the collection of contact information in both countries, frequent contact of participants from HoPES staff, offering participants monetary and symbolic incentives to remain enrolled, well-trained and culturally adept staff that interact with participants, and other means (see Gee GC, de Castro AB, Crespi CM, et al. Health of Philippine Emigrants Study (HoPES): Study design and rationale. BMC Public Health 2018;18:771). Also, our power calculations anticipate 20% loss-to-follow-up over 3 years.

3. Acculturation to a new host environment takes some time and dependent on many factors, both individual and contextual. The role of acculturation in CVDs has been suggested. Further, dietary changes might not happen in a short while as migrants are found to still keep aspects of their traditional foods especially newly arrived migrants. How will 36 months of follow up allow for all these changes?

RESPONSE: We agree that 36 months is not a long enough time to observe the development of chronic health conditions, however data may reveal some change in measures indicative of dietary change and weight gain (e.g., BMI, WHR, blood pressure). The extent of dietary change within 36 months is an empirical question that we will be studying. To assess this, our food frequency questionnaire includes foods that are commonly eaten in the Philippines and the U.S. Also, as mentioned above, our funding for this project limits the time frame for follow-up of both cohorts. We continue to seek additional funding to extend follow up beyond 36 months.

4. The study did not mention ethical approval.

RESPONSE: A sentence has been added to the FURTHER DETAILS section to address this.

5. The methods should provide more details on how the measures would be obtained

RESPONSE: Paragraph 4 under COHORT DESCRIPTION includes text that explains that 3, 12, and 24 month data collection waves for the migrant cohort will be collected by trained research interviewers via telephone call to the participant; and at the 36 month data collection wave, a trained research nurse will make a home visit. For the non-migrant cohort, trained research interviewers and nurses will make home visits for all data collection waves. In table 2, we also add descriptions of equipment used to collect the specific objective measures. Additional details about the types of survey instruments used are available in Gee GC, de Castro AB, Crespi CM, et al. Health of Philippine Emigrants Study (HoPES): Study design and rationale. BMC Public Health 2018;18:771.

Minor comments

1. In the summary of strengths and limitations please revise the statements to be much clearer

RESPONSE: Statements have been revised.

2. Line 14-22 is unclear

RESPONSE: As Reviewer 1 pointed out, the word “countries” was missing, so we add to the sentence. We are not sure what else might be unclear about the rest of this sentence.

3. Although this study is quite different from studies that recruited participants (migrants) in the host country, the discussion of this study could be enriched by literature from studies like the RODAM which has extensively looked at health differences between migrants and the host countries

RESPONSE: Thank you for this helpful suggestion. We have added text that references other notable immigrant health research projects (e.g., National Latino and Asian American Study, Research on Obesity and Diabetes among African Migrants, and the New Immigrant Survey) as examples of examining health status among immigrants, including health disparities relative to individuals born in the destination country.

VERSION 2 – REVIEW

REVIEWER	Oyinlola Oyebode University of Warwick, UK
REVIEW RETURNED	02-Oct-2019

GENERAL COMMENTS	<p>I would ideally like to see your information on response rates for the individual items in the paper (i.e.: the information that you provided to me in your letter- that response rates to all individual items are at or near 100%. including income, and that objective measures were also collected from more than 96% of participants). I think people other than me might be curious about this.</p> <p>Otherwise, thank you, all my concerns have been sufficiently addressed.</p>
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