Reviewer's report

Title: Early life adversity and C-reactive protein in diverse populations of older adults: a cross-sectional analysis from the International Mobility in Aging Study (IMIAS)

Version: 2
Date: 6 April 2015

Reviewer: Elisa Fabbri

Reviewer's report:

Revision

The manuscript, entitled “Early life adversity and C-reactive protein in diverse populations of older adults: a cross-sectional analysis from the International Mobility in Aging Study (IMIAS)”, was aimed at comparing associations between childhood health, social and economic adversity and C-reactive protein in populations of older adults living in different countries. The main findings from this cross-sectional study including 1340 community-dwelling older adults (aged 65-74 years old) in Natal (Brazil), Manizales (Colombia) and Canada (Kingston, Ontario; Saint-Hyacinthe, Quebec) were: 1) CRP levels were higher in Latin American populations of older adults compared with Canadian populations 2) childhood social adversity was related to high inflammation in old age in the Canadian populations but not in the Latin American populations. The authors concluded that that early social adversity has long term effects on chronic inflammation in old age.

Some considerations:

a) The authors clearly expressed both in the abstract and in the introduction the purpose of the study and its rational
b) Previous literature and background of the study are adequately presented
c) Methods and statistical approach are appropriate
d) Results are correctly presented and discussed.

The main strength of the study is the inter-national approach, including different levels of income countries.

Suggestions:

1) Table 2 may be included in supplemental material (as redundant to the figures).
2) The authors should include as limitation that a validation of their results in further studies (diverse populations and settings) is required to generalize their findings
3) in the first paragraph of the conclusion (P.17) they should state something like: “Although further studies are required to confirm and validate our results, they suggest that ...suggest that early social adversity has long term effects on chronic inflammation in old age”.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.