| **Article details: 2020-0064** | |
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| Title | Prevalence of adverse childhood experiences among 45 to 85-year-old individuals: a cross sectional analysis of the CLSA |
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| **Reviewer 1** | Shazeen Suleman |
| Institution | St. Michael's Hospital, Pediatrics, Toronto, Ont. |
| General comments and author response | **Comment:** Introduction: I suggest explaining to readers what adverse childhood experiences are (perhaps even listing them). and how they were established.<br><br>**Response:** We have included a few examples of ACEs in the introduction. Due to space constraints, we have referenced a landmark paper by Felitti and colleagues that discusses how ACEs were established and the association between ACEs and health outcomes in further details. (Page 3 of the manuscript)<br><br>Reference added:<br>Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Marks JS. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine 1998;14:245-258.<br><br>Methods:<br>**Comment:** Is it possible to justify the sample size in the CLSA cohort: how were patients recruited; how was the sample size justified in the original study. In the limitations, you write that the CLSA is generalizable based on age, sex, marital status, urban-rural, and working status but three of these (marital status, urban/rural, working status) were not examined in your study. Is it generalizable on income, race/ethnicity, country of birth?<br><br>**Response:** We are unable to expand on CLSA participant recruitment and sample size estimation for the original study in our paper due to space constraints. However, we have referenced previously published articles (Reference 10 and 11 of the manuscript) that describes the CLSA study design, sampling procedures and sample size estimation, and recruitment procedures. CLSA is generalizable to the comparable Canadian population based on age, sex, marital status, urban/rural dwelling, and working status. However, CLSA has a greater proportion of participants born in Canada compared to the Canadian Community Health Survey (CCHS) Healthy Aging and Statistics Canada Census 2011. CLSA participants, on average, also had higher education and household income than the Health Survey (CCHS) Healthy Aging and the Statistics Canada Census 2011, and CLSA sample did not include individuals residing on First Nation reserves, territories, and institutions. We have highlighted the latter point in our paper as a limitation of the study and referenced a paper that has reported generalizability of the CLSA sample in further detail. (Page 17 of the manuscript)<br><br>**Comment:** Sociodemographic characteristics (page 7, line 24): in your statistical analysis, you say the tables were adjusted for race/ethnicity, but this is not listed as one of the socio-demographic characteristics. How did you determine race/ethnicity? Race/ethnicity is also not a variable found in Table 2 - would you be able to show these findings? |

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| | **Response:** About 96% of the CLSA population is of European ethnicity, with relatively smaller sample sizes for the other ethnic groups. For this reason, we dichotomized ethnic background as 'Europeans' vs. 'Non-Europeans' when adjusting for race/ethnicity variable in the analysis. In addition, we do not have data on race/ethnicity-related contextual factors to enable us to interpret the prevalence results. Therefore, prevalence of ACEs by ethnic groups were not examined in our analysis.<br><br>**Comment:** Table 1 and 2: I appreciate the confidence intervals listed for each factor, but it is difficult to parse out which are significantly different. Could you consider a way to highlight these findings in the table as well (ie. bold, asterisks) and consider p-values. For example, I can see that the CIs for sexual abuse by M/F are significantly different but this gets lost in your table and with no p-value.<br><br>**Response:** We have replaced results presented in Table 2 with Figures 1-5 to help with visualizing the trends. Since the purpose of our paper was to present prevalence estimates of individual ACEs by sociodemographic characteristics, and not conduct hypothesis testing, we do not report p-values. Confidence intervals were included to indicate the precision of the prevalence estimates. We have revised our manuscript to not make comments about statistical significance. (Please refer to Page 5 of the manuscript)<br><br>**Comment:** Statistical analysis: Did you look at any interactions between your variables in your logistic regression? For example, I wonder about the interaction between sex and income. I noted that on your STROBE checklist, item 17 is left blank.<br><br>**Response:** Although, interactions between different variables would be interesting to explore, we did not examine interactions in this study because our primary focus was to report the adjusted prevalence estimates by individual subgroups in the population. Logistic regression analysis was used to calculate the adjusted prevalence of ACEs within groups of the sociodemographic variables. |
| **Reviewer 2** | Sharon Burey SSMD |
| Institution | University of Western Ontario, Windsor Program, Pediatrics |
| General comments (author response in bold) | **Comment:** I would encourage the presentation of analysis based on race and ethnicity, as these findings would be important in terms of policy and clinical practice.<br><br>**Response:** We acknowledge that examining the prevalence of ACEs by race/ethnic background would indeed be useful for policy and clinical practice. However, about 96% of the CLSA population is of European ethnicity, with relatively smaller sample sizes for the other ethnic groups. For this reason, we dichotomized ethnic background as 'Europeans' vs. 'Non-Europeans' when adjusting for race/ethnicity variable in the analysis. In addition, we do not have data on race/ethnicity-related contextual factors to enable us to interpret the prevalence results. Therefore, we choose to not examine prevalence of ACEs by ethnic groups. |