Reviewer’s report

Title: Influence of patient race on administration of analgesia by student paramedics

Version: 0 Date: 21 Jan 2019

Reviewer: Richard Bradley

Reviewer’s report:

Influence of patient race on administration of analgesia by student paramedics by Lord and Khalsa is a good quality retrospective cohort study. The results support the hypothesis that there is a race-based disparity in treatment of pain by student paramedics.

De-identified data was used in the study and it received the necessary approval by an institutional ethics committee. The data set was large; nearly 60,000 patient encounters were reviewed. The approach, using stepwise modeling was reasonable. The authors make the dataset available and there is enough information available to replicate the study.

The results are described and summarized in tables. Results are given as odds ratios of receiving analgesics for analgesics based upon race, sex, age, pain severity and injury cause. The manuscript does not include a graph. While it is acceptable without graphs, it would have enhanced the readability of the data.

This is another valuable piece of evidence demonstrating that healthcare disparities continue to exist. We must continue to search for the reasons these disparities exist so that interventions can be found that will improve health care for everyone.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license ([http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.