Reviewer’s report

Title: A retrospective cohort study of U.S. service members returning from Afghanistan and Iraq: Is physical health worsening over time?

Version: 1 Date: 19 September 2012

Reviewer: Wes Ashford

Reviewer’s report:

The manuscript provides important data that is well analyzed and the writing is generally excellent. Note that the issue of deteriorating health post-deployment is a very sensitive issue.

Some minor points:

- The SF-36 is mentioned in the abstract, then the VF-36 is used in the analysis. This should be more clear as to what was used.
- There is some looseness in the descriptions of “lower” scores for the PCS. Also, there is a discussion of “decreased physical function” that should be more clear. The descriptions and discussions of these issues should be more direct. The “PCS scores were lower” should be described as “The PCS scores indicated a poorer level of health” or “The PCS showed a decline of scores suggesting deterioration of health”. The “decreased physical function” in the conclusions is unclear since the issue is not “activities of daily living functions” but a decline on the physical function factor of the PCS indicating a lower level of physical health or more physical health problems (the word lower refers to the data, but the discussion should address the underlying problem measured by the data).
- Table 1 – add % for gender (shouldn’t the community sample be included also?)
- Figure 1 – it is unclear why the community sample goes from -1 to 0 (and this drop is bigger than the subsequent one. Shouldn’t this be from pre-deployment to just returned from deployment?
- Figure 2 – should show a “before deployment” bar or estimation. Also, the military comparison sample scores should be here.

Level of interest: An exceptional article

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests