Reviewer's report

Title: Reproductive health of male Australian veterans of the 1991 Gulf War

Version: 1 Date: 23 August 2006

Reviewer: Margaret Ryan

Reviewer's report:

General

This is a well written manuscript on an important and challenging topic. This reviewer commends the investigators on their work.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

This reviewer is concerned about the apparent overstatement of the one “significant” finding, i.e., reporting of more fertility difficulties by Gulf War veterans. Given a 95% confidence interval of 1.0-1.8, this finding is “borderline significant” from a statistical perspective. Perhaps more important, the finding is not borne out by the respondents own experiences, in that veterans also self-reported fathering more children without seeking more infertility treatments. The authors surmise that perhaps infertility experiences of veterans were transient. A more plausible explanation may be that health concerns do not always equate to health experiences, especially in a sensitized population like Gulf War veterans. Because Abstract text is so important, this reviewer strongly recommends that the clause, “…apart from a small increased risk of reported infertility in the period following the Gulf War,” be removed from the last line of the Abstract, making the text more consistent with the authors’ Conclusions in the body of the manuscript.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The authors do a nice job of describing methodological limitations. This reviewer respectfully recommends that another limitation worth noting is the lack of reliable exposure data in these populations. That is, the respondents are simply categorized as exposed/unexposed to the Gulf War experience of 1991, and (like other studies in this area) investigators cannot account for specific exposures in theatre and other occupational and behavioral characteristics that may affect reproductive health outcomes.

Discretionary Revisions (which the author can choose to ignore)

It is intriguing that causes of fertility challenges were reported as “found” by a small number of survey respondents. This reviewer wonders if actual causes were then reported and, if so, what percentage of causes were male-related. Given that more fertility challenges are female-related than male-related worldwide, yet the exposure of concern is only male-related here, the details on causes would be interesting to add, if available.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.