Reviewer’s report

Title: The incidence variation of prostate and cervical cancer according to socioeconomic level in the Girona Health Region.

Version: 2 Date: 14 April 2014

Reviewer: Nuria Aragonés

Reviewer’s report:

The manuscript addresses an interesting issue, and the data are well analyzed. However, the authors have to review the text of the manuscript before publication, specially the introduction section and the discussion. I would suggest the authors to improve the literature search and the presentation of the available literature on the topic. Some references used in the introduction section lack of accuracy and are not updated with the most recent publications. Finally, in the discussion section, the authors should compare their results with previous studies.

Major Compulsory Revisions

Introduction: This section needs revision. References on cancer incidence are not updated, and some of them are incorrect. I would suggest to re-write this section, using more recent references for cancer statistics and to add a summary of the main risk factors of the studied cancers. I would highlight some of the points that needs revision.

- Third paragraph. The authors state: “These cancers are the most common in men and women respectively worldwide”. This sentence is not correct. According to Globocan 2012, “Prostate cancer is the fourth most common cancer in both sexes combined and the second most common cancer in men”. And regarding cervix cancer, “Cervical cancer is the fourth most common cancer in women, and the seventh overall, with an estimated 528,000 new cases in 2012.” The authors should review this paragraph and I would suggest to cite Globocan 2012 (since it provides the most up to date incidence and mortality data worldwide).

- Fourth paragraph. First sentence. The authors provide information on prostate cancer incidence in Europe, while they quote a “Spanish National Cancer Registry”. The authors should review this paragraph and use the appropriate references.


- Fourth paragraph. Last sentence. The authors provide information on prostate cancer incidence and trends in the world, though they quote the Spanish Association Against Cancer (Asociación española contra el cancer –AECC-) webpage. The authors should review this paragraph and use the appropriate references.

- Fifth paragraph. In this paragraph, the authors use three different sources to
provide data on prostate cancer incidence: the “National Registry of Prostate Cancer 2010”, a manuscript with incidence projections, and GloboCan 2008. I would suggest using GloboCan 2012 to provide updated data on cancer incidence in this paragraph. The authors could also include the reference by Larrañaga (Annals of Oncology 2010) on cancer incidence trends in Spain. I would also suggest dropping the reference of the “National Registry of Prostate Cancer 2010”, since this data come from a study carried out by the Spanish Urology Association and it does not refer to a validated population cancer registry.

- Sixth paragraph. I would suggest using a more suitable reference.
- Seventh paragraph. This paragraph also needs to be reviewed. The sentence says: “Since the introduction of the Prostate Specific Antigen screening, the diagnosis rate has increased significantly but the specific mortality rate has decreased in Spain”. However, the authors quote a study whose aim was to analyze the evolution of the survival of patients diagnosed with prostate cancer during the period 1995-2003, and not the trends of the incidence and mortality by prostate cancer.
- Eighth paragraph. The authors should review the references they used here. References 15 and 16 are inaccurate in this sentence. I would suggest using a more updated reference instead of reference 15, and reference 16 does not match the sentence in which it is quoted. According to GloboCan 2012, “Cervical cancer is the fourth most common cancer in women, and the seventh overall, with an estimated 528,000 new cases in 2012”. In this same paragraph, please change references 10 and 17 by some appropriate ones.

Discussion: The discussion section is too short. I would suggest reorganizing this section to include a deepen discussion of the results and to compare their results to those found in the literature. In the current version, this section includes only two references. The authors may include the following points:
- A first paragraph summarizing the main results of the paper.
- Results for each studied cancer
- Comparison of the results to those found in the literature (national/international context), are they similar or different from previous studies? Why? When explaining the study results, please consider all possible explanations.
- Strength and limits (quality of data, methodological issues, etc…)
- Conclusion (and main message)

Minor Essential Revisions

Abstract: Background. I would suggest saying “…and a deprivation index”.

Methodology. Second line. When it says: “In order to assess the relative risk, …”, I would suggest to say: “In order to assess prostate/cervical cancer risk, …”.

Keywords: Please change “Besag, York y Mollie model”, to say “Besag, York and Mollié model”.
Methods: The data are well analyzed and the authors explain the methods used with a lot of detail. If anything, I would suggest shortening a bit the section.

Results: In my opinion, this section does not have to include references (this section should describe the results only). I would suggest the authors to start the section in the second paragraph.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.