Author’s response to reviews

Title: Public awareness of cancer risk factors and its determinants in Morocco: A population-based cross-sectional study

Authors:

Karima El Rhazi (elrhazikarima@gmail.com)
Bahia Bennani (bahia_bc@yahoo.fr)
Samira Elfakir (elfakirsamira@yahoo.fr)
Ahmadou Boly (ahmadouboly@hotmail.fr)
Ahmed Zidouh (azidouhma@yahoo.fr)
Rachid Bekkali (bekko26@yahoo.fr)
Chakib Nejjari (onejjari2000@yahoo.fr)

Version: 3
Date: 31 October 2013

Author’s response to reviews: see over
Dear Reviewers,

Thank you for sending these comments. They are very useful and we have modified the manuscript according to the specific comments. Please find below our point by point response to the specific comments of the reviewers.

Reviewer: Jo Waller

1) In the Abstract, please give the maximum knowledge score (i.e. 14) so that the reader can interpret the mean knowledge score.

It was rectified in the manuscript.

2) The authors refer to 'attitude' in the final line of the Abstract - should this really be 'knowledge'?

It was rectified in the manuscript.

3) The authors say there are 14 factors in their scale - I counted 15 (as passive and active smoking are 2 separate factors). Please clarify.

Passive and active smoking were considered as one factor, this was clarified in material and methods section as: So, 14 cancer related factor were studied, namely passive or active smoking, alcoholic beverages, obesity, physical inactivity, food coloring, red meat, fat, salt, fruits, vegetables, olive oil, green tea, coffee, feeding maternal.

4) The risk factors and protective factors chosen were not obvious to me. I would have included sun exposure and viral infection as clear risk factors, and screening as a protective behaviour. I'm not aware of strong evidence on food colouring olive oil, green tea or coffee. Please cite the papers used to choose the factors included.

The reviewer is right but we were focused in this manuscript on some much supposed known factors either common alimentary factors or some attitudes basing on our knowledge and observation about Moroccan population. For sun exposure which is risk factor of melanoma, this type of cancer it's not a public health problem yet. For viral infection, Moroccan population is not sufficiently literate to recognize viral infection and distinguish it from other infection. So we couldn’t ask about this factor. Even for screening which was not popular in Morocco before 2008. Some references for included factors were added to the text and references section.

5) Providing information on the common cancers in Morocco (in the Introduction) might help to provide context for the choice of exposures included in the scale.

Information on the common cancers in Morocco was given as follow: The most common cancer in Morocco are breast cancer, lung cancer, cervix cancer, colorectal cancer and prostate cancer.

6) Although significant between-group differences are found, they are very small. Could you author comment on the clinical / public health impact of a difference of <1 on the scale?

Although the differences are very small, the impact on public health is very important because this small difference was observed on a small sample which will be great in large population.

7) In the Discussion the authors suggest that the association between smoking and knowledge could be explained by lower levels of education in smokers. But in the multivariate models,
the effect of smoking persists after controlling for education. Might there be an alternative explanation?
I agree with the author. This sentence was deleted from the manuscript.

8) The labels used for housing category in Table 3 are different from the other tables - please make them consistent.
This was rectified in tables as follow:
Luxurious or modern = High standing

New medina = Modern housing

Old medina = Traditional housing

Poor housing or slums = Slums

Rural housing = Rural housing

9) The article needs a lot of minor editing to improve the English (both in terms of grammar and spelling) - please make sure it is checked by a native speaker.
It was done.
Reviewer: Redhwan Al-Naggar
Reviewer's report:
Major Compulsory revisions
1. Sample size should be calculated to represent the general population
This was specified in Material and methods section as: Sample size was calculated to represent the general population on the basis of 15% risk factor prevalence, 2% precision, 95% CI and a cluster effect of 2. Thus, sample size was estimated at 2448 and rounded to 3000 persons to compensate for people refusing to take part or being absent during the survey. The people to be surveyed were selected at random from 150 communes, in clusters of twenty households per commune. A cluster was defined as a neighbourhood in an urban area and a locality in a rural area. One cluster was selected at random from each commune included in the survey and one person aged 20 years or above from each household of the cluster was selected at random. The total cluster selection was done proportionally to the distribution of the Moroccan population in urban and rural areas (53 and 47%, respectively).

2. The language of the questionnaire should be stated either in Arabic or English or other language
The questionnaire was developed by the authors and was stated in French which is second official Moroccan language. It was administered in local dialectal language by trained pair (one man and one woman) including physicians and nurses chosen from the same regions as the participants.

3. Reliability and validity of the questionnaire should be mentioned
This was rectified in the manuscript as follow: The questionnaire’s face validity was examined in a pilot study in 20 participants and showed that the questionnaire was acceptable and understandable.

4. Pilot testing for clarity of the language should be mentioned (if any)
This was rectified in the manuscript as follow: The questionnaire’s face validity was examined in a pilot study in 20 participants and showed that the questionnaire was acceptable and understandable.

5. The stratified sampling is not clear enough to re-produce the methodology, more details is needed
It was rectified and detailed more in the method paragraph.

6. I would like to ask, if the questionnaire developed by the authors or adopted from other study.
The questionnaire was developed by the authors and was stated in French which is the second official Moroccan language. This was added in the material and methods section.

7. Scoring of the total score of knowledge need to be added to the methods
It was added as: "Scoring of the total score of knowledge is ranged from 0 (if the subject did not recognize any factor) to 14 (if all factors have been recognized)."

8. Name of the places that data collected should be mentioned in details
The details of the numbers of included communes by origin (urban or rural) in each named region of Morocco are given in the table 1.

9. Who collect the data? not mentioned in the methods
It was rectified in the manuscript as follow: It was administered in local dialectal language by trained pair (one man and one woman) including physicians and nurses chosen from the same regions as the participants. The data were collected in the subjects’ homes during a personal interview which was carried out homogeneously from Monday to Sunday.

10. The confidentiality of the data of the participants not mentioned in the Methods

It was rectified in the manuscript as follow: Any information collected on individuals has been kept confidential and anonymous.

11. Table 1. Should be "Table 1. Socio-demographic characteristics of the study participants (n=3000)"

It was rectified.

12. Table 2 educational level and housing; the p-value should be p<0.001 not 0.000 (which means zero)

It was rectified.

13. Table 3 need to replace 1 with "reference"

It was rectified.

14. Table 3 the p-value should be same dismal

It was rectified.

15. Questionnaire should be attached in the appendix

It was added in appendix.

16. The references need to be updated specially 1, 5 and 10.

We think that these references are still useful even they are old.
Reviewer: Terry Slevin
Reviewer's report:
Major Compulsory Revisions

Some justification of the risk factors examined would be of value. For example, it would be important to provide references for each of the factors listed in the 14.
Some references of included risk factor were added in the manuscript.

Specific concerns here relate to the nomination of Olive oil and green tea as proven means of preventing cancer, and some food colouring agents as a proven causative factor. I am unaware of any solid evidence linking olive oil as a proven preventive agent for cancer. There is a growing body of evidence suggesting green tea may be a preventive agent in cancer but this may not yet have reached the point of solid level one met analysis status. Similarly, while some study in animal models has been done on some food colourings as potential carcinogens, the authors should list an authoritative source and nominate specific food colouring agents they consider as proven carcinogens.

I agree with the reviewer. The chosen factors have potential effect (protective or risk factor) on cancer. Olive oil and Green tea and food coloring were chosen here in this study because of their potential effect on cancer but also because they are common products usually consumed by this Mediterranean population. This was added in the manuscript.

Also, what is the sample frame being used? By this I am asking how did the research team establish a sample frame? Specifically, was it 3000 randomly selected names of adults from the Moroccan an electoral role, the telephone directory? The response rate is extraordinarily high by modern standards.
Details about sampling procedures and subjects inclusion are given in the sampling method paragraph.

The scoring system could be revised. If the research team reported those who responded “don’t know” separately from yes or no this would add more information for the reader.
In the scoring system, we thought that reporting right answer was more useful than comparison between (don’t know) vs (either “Factor Protector” or “Risk factor”). If we had done so, we could find in this last category (either “Factor Protector” or “Risk factor”) many false answers which means that people don’t know the right one and could be categorized as they know.

The statement in the introduction that “However, knowledge of practices and risk factors associated with cancer has never been evaluated” may be true if the authors added “… in Morocco”. For example this study, while not in peer review journal, reported a similar study. “UICC population survey of cancer-related beliefs and behaviours. Preliminary findings: cancer-related beliefs and behaviors of low-, middle-, and high-income countries.” (http://forms.uicc.org/templates/uicc/pdf/survey/survey.pdf)
It was rectified as follow: However, knowledge of practices and risk factors associated to cancer has never been evaluated in Morocco.

Minor Essential Revisions
Some spelling errors exist in the tables (eg “femelle” in table 1 and 2, “slims” in table 3)
They were corrected.