Author’s response to reviews

Title: A Systematic Review on Methods of Health Research Economic Impact Evaluation

Authors:

Bahareh Yazdizadeh (baharehyazdizadeh@yahoo.com)
Reza Majdzadeh (rezamajd@tums.ac.ir)
Hojat Salmasian (hojjat_salmasian@yahoo.com)

Version: 3 Date: 3 November 2009

Author’s response to reviews: see over
Dear Editor-in-chief,

Allow us to extend our gratitude to you and your worthy reviewers for the valuable comments on the article. We have made the modifications accordingly and think the article has now improved. We have also taken into account the reviewers' suggestion on having the paper scientifically edited by an English-speaking person. We hope that the article is now suitable for publishing in your journal.

Yours Sincerely,

In response to Steven Wooding's comments:

Major Compulsory Revisions:

1- There are various examples of initiatives in the world that, as leading initiatives, have attempted to systematize activities or produce tools with acceptable standards at international level. Some of these have been backed up by international organizations like WHO that have produced the WHO-CHOICE for studying cost-effective interventions, and others that have taken them up on their own interest such as the ‘Cochrane Collaboration’ which has been able to define high quality standards for conduction of systematic reviews and has greatly helped researchers. The point is that an experienced group and suitable representative of stakeholders take responsibility and it is not necessary to spend all financial and human resources. If recommendations are made at ministry summits that systematize health research, then this particular field should also be put forth internationally and its goals should be defined for the four-year period.

2- As the reviewer suggested we added the subject as mentioned the fourth question of the article .(page 4 paragraph 1 and page 9 paragraph 4).

3- The point raised by you in the first part is correct and the mistake is the result of back translation from English to Persian and subsequently from Persian to English. This was hence corrected (page 5 paragraph 3).

Concerning the second part which questions the local and global impacts, we would like to point out that although studying economic benefits of health research is in fact a kind of ‘economic evaluation’ and defining the perspective is necessary, but the purpose of our study was to answer the questions raised in the beginning of the paper. However, since the issue raised is correct, we have addressed it in the related section (page 5 paragraph 4).

4- Part one: Producer rent has been introduced as a commercialization indicator in the CAHS report, and has been defined as “Producer rent is the economic benefit to a company on top of expected revenues”. In our opinion, there is no difference in meaning between the definition put forth in the report and in our paper “Producer rent’ is the economic benefits of companies
that are more than expected”. However, we have replaced our version with the original one for the sake of convenience (page 8 paragraph 5).

Part 2: There is no consensus on the appropriate time horizon for evaluating economic benefits of health research. Experts have proposed 3-5 years on page 19 of the CIHR report. The ‘UK Evaluation Forum’ report in 2008 has proposed 17 years as the suitable time horizon. However, we have added the latter report and its relevant points upon his advice (page 9 paragraph 4).

Essential Minor Revisions:

5- Confounder difficulties of ecologic studies can arise for multiple reasons such as cross level inference and unavailability of data relevant to some variables. In macro-economic studies, data are not collected specifically for one project; we do not have necessary variables to assess their effectiveness, and eventually cannot accurately determine the pure effect of the main variable. For example, in examining the relation between budget spent on pharmaceutical research and reduction of CVD, we cannot calculate the simultaneous effect of physical activity or air pollution and extract the pure effect of pharmaceutical research. In fact we will have an attribution problem which is considered as a confounder (which is the result of the study).

6- Thanks so much for suggesting these important key words. We added these key words and simultaneously searched in the same data banks again. We found 96 articles primarily; after evaluating the titles and abstracts we selected 16 articles and after a secondary screening by going through the full texts we selected one relevant article. We included this search in our paper.

7- The report was added to the study. The reason it was not previously included in the study was its unavailability at the time of conducting the study. The aim of this section was to address the attribution problem, and two points are raised here: time horizon and target population, which according to the reviewer have not been clearly explained. We therefore tried to apply the reviewer’s comment by reviewing the concepts and wording (page 8 paragraphs 3).

Discretionary Revisions:

8- According to the reviewer’s comments we changed ‘ecologic study’ to ‘macroeconomic study’ in the paper. We had not come across the term ‘ecologic study’ in the studies and reports reviewed in the study. But since the authors are epidemiologists by training they eyed these types of studies methodologically. In epidemiology ‘ecologic study’ is a known term that has a specific meaning (like its confounders and ecologic fallacy). In fact, in epidemiology ‘ecologic study’ and ‘macroeconomic study’ are synonyms.
9- The authors agree with the reviewer in that the solution put forth is ideal, but at the same time believe that researchers can be expected to foresee the significant and economic effects of their studies if any. For example, if we intend to change clinicians' practice in using MRI, both the researcher and policy maker should be aware of the economic impacts of relevant research like “How is magnetic resonance imaging used in Iran?”
In response to Elizabeth Kalucy’s comments:

Major Compulsory Revisions:

1- The reviewer’s accurateness is praiseworthy. Actually the authors didn’t mean to say that if research does not have economic benefits then it should not be done. It has also been stated that even if studies show that economic benefits are not desirable, the reason behind them should be sought out with further studies and be obviated. However, in order to clarify the statements the wording was modified (page 2 paragraphs 2 line 7).

2- The modification advised by the reviewer was made (page 4 paragraph 2).

3- The modification advised by the reviewer was made.

4- The modification advised by the reviewer was made.

5- Point 3 is not about ‘economic rent’, and is in fact the continuation of points 1 and 2 and economic rent is a sub-division of point 2 (page 7 point 2).

6- The modification advised by the reviewer was made (page 8).

7- The modification advised by the reviewer was made.

8- In certain cases, the cost of implementing research results in specific populations is high, but their utilization may not be that considerable. So should we consider the cost of implementing research in calculating the benefits of research or not? No doubt if the cost of implementing research results are taken into account the benefits of these studies in the population will also decrease. The authors’ intention of stating the role of ethical values in current decision making was to highlight existent theories in health equity. Those who believe in the ‘Egalitarian theory’ believe that all classes of society should enjoy an equal level of health regardless of individual’s utility in the society. Whereas those who believe in the ‘Libertarian theory’ are interested in distribution of resources on the basis of entitlement. It is no surprise that accepted ethical values in a country’s policy making system are the grounds of decision making in a specific field. Modifications were made in the text to better clarify the authors’ intentions.

Regarding the reviewer’s comments on implementation of research we meant “changing behavior in the final target population” and it indirectly includes all the costly cases mentioned by the reviewer.

9- The modification advised by the reviewer was made.

Concerning the second part of the reviewer’s comment, the authors meant that discussion on the economic benefits of research is meaningful when research results are implemented in their final target population. Obviously, if research results are not implemented then their economic benefits cannot be calculated directly, and implementation has actually not taken place in the real world (and we can only estimate). We have modified the text for clarification.
Essential Minor Revisions:

10- The modification advised by the reviewer was made.

Discretionary Revisions:

11- The point raised by the reviewer was included in the study (page 12 paragraph 3).

12- The point raised by the reviewer was included in the study (page 12 paragraph 2).

13- The modification advised by the reviewer was made.