Author's response to reviews

Title: Current European guidelines for management of arterial hypertension: Are they adequate for use in primary care? Modelling study based on the Norwegian HUNT 2 population

Authors:

Halfdan Petursson (halfdanpe@gmail.com)
Linn Getz (linngetz@med.is)
Johann A Sigurdsson (johsig@hi.is)
Irene Hetlevik (irene.hetlevik@ntnu.no)

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Author's response to reviews: see over
Dear Editor Dr. Robin Cassady-Cain

We refer to your e-mail answer dated 17 July 2009 regarding our paper

*Current European guidelines for management of arterial hypertension: Are they adequate for use in primary care? Modelling study based on the Norwegian HUNT 2 population*

As before, we want to express our appreciation of valuable comments provided by the two reviewers, and for giving us the option to revise our manuscript for a new round of evaluation.

The considerations of the reviewers have again lead to substantial revision of the manuscript. This time we will refer to the reviewers as Reviewer 1 (Henry EE Stoffers and his second review dated 21 May 2009) and Reviewer 2 (Jonathan Mant’s review dated 17 July).

We will comment directly to the numbered (1-4) points made by Reviewer 1 and we do so in light of the supporting comments from Reviewer 2.

1. The reviewer repeats that he would like to see the Method section shortened. He thinks that the guidelines should not be presented as such, only discussed when it is relevant for scientific choices made in our study. Although Reviewer 2 says this is not a major concern for him, we decided to follow Reviewer 1’s request. We have rewritten and shortened the Methods section according to the Reviewer 1’s suggestions. We do this because we realize that readers who are genuinely interested in our paper are likely to have some basic knowledge of the type of guideline in question, and just by looking at Figure 1 (the first figure in our text) they are likely to understand how the risk system of the guideline is organized.

2. We definitely understand both reviewers’ request that our calculation regarding the number of follow-up visits for each risk category should be clearly explained. We have now revised the manuscript with the aim to make it easier to see how we found these numbers; what numbers are specifically stated in the guideline, and what are our interpretations. In fact, it is only the number 3,5 visits per year (relevant for several risk categories in Fig 1) which has room for interpretation, the other numbers are given in the guidelines. As suggested by Reviewer 2, we have performed additional
workload/workforce analyses applying 3.0 visits/year (= less intensive follow up) and 4.0 visits/year (= more intense follow up) to show how (in)sensitive our estimates are to changed interpretations.

3. Regarding the advice to deal with Diabetes as a separate risk factor, we argue that Diabetes is included with the other conditions in Figure 1 in the referred guidelines (in row three: “3 or more risk factors, MS, OD or Diabetes”, the same way as in Figure 1 in our manuscript. Reviewer 1 may however be referring to table 2 in the guidelines, where Diabetes has indeed a separate row. A main message of the guidelines, as we understand them, is that they do not make any major difference in follow-up visits between people at risk on the one hand and people with known disease on the other. We do however have data on this; we know that the number of patients with diagnosed diabetes in our population (as defined in 1995-7) was 1262, which corresponds to (x 3.5) = 4417 visits/year per 51,066 inhabitants (eligible for modelling) = 3 GP positions/100,000 adults. This subgroup does not explain why the overall workload figures are so high. We do however agree with Reviewer 1 that focus on “extra” work is of interest. As we were not able to make such analyses, we have only focused on the total workload. We have reviewed the text accordingly.

It might also to be of interest to calculate the data of all diseases of concern in a similar way, but as said before we considered this beyond the aims of the guidelines and our present paper. This partly explains why we do not make any clear distinction between primary, secondary and tertiary prevention. Because of the rapid development in biomedical technology, we are more or more looking at a continuum of pathology (from risk factor load, via subclinical disease manifestations to clinically manifest disease) and the definitions of prevention levels become more and more unclear in the clinical setting. Existence of two types of definitions of primary and secondary prevention (one epidemiological definition and another clinical one) make the terms even more difficult to apply.

4. Under the heading Minor revisions Reviewer 1 thinks the discussion needs to be adapted. We have made minor revisions in light of the sensitivity analysis, but as explained above, we refrain from embarking on a discussion of the different stages of prevention.

All authors have approved the revised version of our paper, and we do hope that you find our revised manuscript satisfactory.
Akureyri August 2nd 2009

Sincerely, and on behalf of the authors

Halfdan Petursson