Reviewer's report

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

Version: 2 Date: 21 May 2009

Reviewer: Henri E E Stoffers

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Major Compulsory Revisions

1. The authors integrated the figures/tables, but did not shorten the text of the Method section, where they describe the Hypertension Guideline. If they would add the guideline’s treatment instructions for each risk level category under ‘Figure 1’ (average risk: no intervention; low risk: …, moderate … etc.), they do not need to give a summary of the guideline. Discussion of the guideline is only relevant for choices that were made for operationalisation of variables, decisions on non-available variables and the estimation of the workload (incl. follow-up visits). So in my view, most of the text between ‘Fig 1 approx here’ (p. 5) and ‘The original HUNT population (p. 7) can be skipped. In fact, in the first paragraph on p. 9 the authors explain the choices for the work load estimation (number of visits/risk category). Later, on pp. 9/10 work load estimation is addressed again. So I really think the method section could be shortened and the translation of guideline components into variables and work load estimation could be integrated in these sub paragraphs.

2. Unfortunately, the 2007 Hypertension Guideline does not describe very well the number of follow-up visits per risk category. So I can understand the difficulty the authors had in making choices here. Nonetheless, the authors did make decisions: 0, 2 or 3.5 follow-up visits. However, in Figure 1 and the text it is not made very clear why these numbers of f.u. visits were given for the various risk categories respectively. It seems inconsistent: ‘Low added risk’ can lead to 2 or 3.5 visits, and ‘Moderate added risk’ can lead to 2 or 3.5 visits. All these choices have a great impact on the estimation of the work load/follow-up visits (Figure 3, text). That could be one reason for the high estimated work load. Of course the authors could argue that their choices are a low estimate for all categories (?), but one can also argue that the higher the risk category, the closer the monitoring (i.e. the higher the number of f.u. visits) should be. So a different arbitrary choice could be: low added risk (of all types) --> 2 follow-up visits, moderate risk and higher -> 3.5 follow-up visits. Life style changes need to be discussed in all situations; in my view that cannot make the difference between 2 and 3.5 f.u. visits.

3. Furthermore, ‘Diabetes’ is taken together with ‘MS/OD/3 risk factors’, whereas in the Guideline it is a separate category. In my view, it is a sensible separate category, because it enables the distinction in primary and secondary prevention.
In fact, the authors do not make a distinction between ‘primary’ and ‘secondary’ prevention at all. And that could be another reason why their overall figures are so high. In my view, ‘secondary prevention’ - i.e. the care for patients with Diabetes or established Cardiovascular or Renal Disease – should not be considered as ‘extra work’: it is what doctors normally (should) do, i.e. treating individual patients. I agree with making these calculations, however the discussion should focus on the ‘extra work’, i.e. primary prevention (reducing risk, ‘prevention paradox’ etc.), and its impact on health care resources (doctors, nurses and other ‘trained staff’).

Minor Essential Revisions

4. If the authors follow the lines of thought expressed here above, the discussion also needs to be adapted and in fact focus on ‘how large are the necessary resources for primary prevention and who should provide primary preventive services’, given the fact that the lower the cardiovascular risk, the more patients need to be treated to prevent one cardiovascular event. That fact is known to all doctors, and in my view that is why we often are reluctant to take up tasks that could be considered ‘public health tasks’ (as opposed to individual health care).

Level of interest: An article of importance in its field

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'