Author’s response to reviews

Title: Communicating effectiveness of intervention for chronic diseases: what single format results in the "best" decision?

Authors:

Henrik Stovring (hstovring@health.sdu.dk)
Dorte Gyrd-Hansen (dgh@dsi.dk)
Ivar S Kristiansen (ivarss@c2i.net)
Jorgen Nexoe (jnexoe@health.sdu.dk)
Jesper B Nielsen (jbnielsen@health.sdu.dk)

Version: 2 Date: 28 March 2008

Author's response to reviews:

We are delighted that we are allowed to revise the manuscript and grateful for many constructive comments and suggestions. We have revised the whole manuscript carefully, and we have added one figure to ease the understanding of the study. The new Figure presents the design of the study, but we may add another figure if the editor would wish a graphic explanation of the relationship between ARR, NNT, ARR and POL.

In the following we will explain in detail how we have responded to the specific and general comments.

Reviewer 1
No issues raised by this reviewer.

Reviewer 2
We have revised the manuscript in several places to accommodate the general comments about the validity of the “full” information as gold standard for optimal decisions. In particular, a new paragraph in the discussion addresses this issue.

Abstract
Objectives: We have added that a pictorial presentation was part of the comprehensive information.
Subjects and Methods: Corrected to 40-59.
Interpretation: Revised to reflect the major modification of the paper.

Introduction
Para 3: Examples are now given in a Figure 1
Para 4: See previous comment.
Para 5: We believe that it is better to describe this in the Subjects and Methods section, where we have added a sentence describing this.
Methods
Para 2: In the original manuscript (para 3 of methods) we mentioned that the remaining 8 interview types were used for a discrete choice, and would prefer to keep it as it stands.
  - We have changed the wording from interview format to interview guide.
  - We have clarified the references to the appendices, so that it is clearer what they represent.
Para 3: See answer above on new sentence in the Introduction.
Para 4: We have provided information on the number of interviews per interviewer.
Para 5: Power: We have amended the necessary information.
Statistics
Para 2: We have added the requested information.
Results
We have added the requested elaboration about consistency.
Discussion
See answer above to the general criticism raised by this reviewer.
Response to reviewer 3
Major:
Context: While we agree that many studies have investigated how risk formats influence subjects' decisions, we would maintain that this study is the first to compare treatment decisions made with comprehensive information and a single risk format, respectively, in a randomized controlled trial. We also agree that the study could be put in a better context and have revised the first para of the introduction accordingly.
Introduction
1. We agree that the previous text was too strong on this point and have changed the introduction to reflect this. While adherence (or non-adherence) is the result of a complex set of factors, we still think it may in part be linked with understanding as claimed in the cited reference (3).
2. This was the major point raised by reviewer 2, see response to this reviewer.
3. We agree and have changed the wording to indicate that pictorial representations were included as a mean of presenting natural frequencies - as endorsed in the cited reference (6).
4. A paragraph has been added to discuss the need for variation in baseline risk and effect size (see response to reviewer 2), and we hope this clarifies this issue as well.
5. See response to reviewer 2. While it may be unambitious to identify the most
concordant format, we believe it would still constitute valuable guidance for GPs needing to have an efficient way of providing risk information in their clinic. The key issue is that GPS are unlikely to provide “full information” due to time constraint, and it would be useful to know more about which single format that yields the highest concordance even if we do not know whether full information results in optimal decisions.

Methods

6. The interviewers' assessment of respondents' understanding was based on subjective judgment, and this is now stated in the article. The interviewers are professionals and do interviews every day in different settings and on varying topics. While the true understanding is probably not obtainable, we think that interviewers' experienced judgment is the most reliable indication we can get.

7. We have responded to these issues in the response to reviewer 2, and hope that this is satisfactory.

Results

8. We agree and have a short sentence to the Results section, and discuss it more extensively in the Discussion section.

Discussion

9. We agree and have moved this sentence to the Results section.

10. We have added a sentence to the Results section stating this finding.

11. We agree that we cannot claim that full information necessarily results in optimal decisions. We have revised the discussion of the validity of the methods used in this study (see new paragraph) accordingly. We do claim, however, that nervous patients in a busy GP practice may not understand any better than they do in a standardized experimental study.

12. We consider the term “affect bias” to be a usual term in the context of decision psychology – see reference 14..

13. As in the Introduction we have changed this to better reflect our intention: Natural frequencies are more readily understood.

14. We have removed this sentence and the reference to expected utility theory.

Minor

15. We have tried to clarify these sentences.

16. It is difficult to exactly identify the cause for this apparently counterintuitive finding. One possible explanation could be the fact that women and older subjects are overrepresented in our sample. Quite conceivably these may have higher educations than the Danish average in this age group, and yet have lower income. Alternatively it might be an effect of the study being conducted in an urban setting. Or it might be a severe under-representation of relatively low-educated men running their own enterprise. In short, we don't know, but also do not find this observation unrealistic. Finally, it should be noted that in Denmark the correlation between income and educational level is not very strong.