Reviewer's report

Title: Two distinct do-not-resuscitate protocols leaving less to the imagination: an observational study using propensity score matching

Version: 1 Date: 27 November 2013

Reviewer: Hilde Buiting

Reviewer's report:

Minor comments (essential):

Abstract

Abstract Introduction.
For me, the two different DNR-orders were new; while reading the abstract the difference between the two different orders was therefore not altogether clear to me. I suggest to clearly define these two different orders in the introduction/methods section.

Abstract Methods.
‘Three medical costs’ is unclear; please explain.

Abstract Conclusion.
In the introduction section, it is not mentioned that DNR patients may receive inadequate care. The authors’ conclusions are therefore difficult to follow. I therefore suggest to change the Introduction part to be more in line with the concluding remarks.

Introduction.

Methods
Paragraph ‘Medical care’:
The authors indicate to use six ‘aggressive’ interventions to describe medical care. How did the authors come to these 6 interventions? Is a hospice/palliative care consultation standard practice in the selected hospital?

Paragraph ‘propensity score matching’:
I’m not familiar with propensity score matching; it seems logical to include patient demographics and clinical data as confounding variables and to compare the two groups separately. However, I would suggest to explain why the authors chose for this statistical analysis. In my opinion, a description of actual practice and a multivariable logistic regression analysis could have been another option to answer the research questions too (and easier to comprehend).
Results and discussion

40 confounding variables; that’s a lot, could the authors please explain this finding a little more?

Paragraph ‘main findings’:

Last sentence ‘according to our study….decreasing medical care’; is probably the most important conclusion of the study. However, this needs to be explained better. Perhaps, it would be good to add here (and in the Introduction section) that debates about DNR orders partly focus on the idea that medical professionals blindly decrease medical care if patients do have a DNR order. This study clearly shows that this is not the case, which is an important finding.

Paragraph ‘strengths and limitations’:

Please explain what is meant with ‘it is clearly demonstrated that medical care provided is not decreased after the order was written’. I agree with the authors that the protocols resulted in different patterns of care (what is in fact the intention of the two different protocols).

Minor comments (discretionary):

Paragraph ‘Results and discussion’:

I would suggest subdividing in a result and discussion section. It is somewhat confusing right now, e.g. the introductory paragraph of the results section is a summary of what follows. Subsequently a summary with an interpretation step follows (page 13/14).

‘Aggressive care’:

I would suggest using another term than aggressive interventions. For some patients this may indeed be aggressive but for other it may not.

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare I have no competing interests