Reviewer's report

Title: Development, validation, and results of a survey to measure understanding of cardiopulmonary resuscitation choices among ICU patients and their surrogate decision makers

Version: 2
Date: 9 February 2014

Reviewer: Adrienne Raben

Reviewer's report:

Major compulsory revisions: none

Minor Essential Revisions:
pg 4, 2nd paragraph, 4th line: "...as well as well" : leave out last 'well'
pg 6, subchapter study participants, 6th and 9th line: "...(patient) making THEIR own medical decisions": change 'their' into 'his' (as gender-neutral) or alternatively change patient into 'patients'.
pg 9, 2nd paragraph, 7th line: "literacy may also contribute (leave out 'd' at the end), or alternatively: may also HAVE contibuteD"
pg 10, 4th line: 'some physicians didn't know WHAT the letters CPR...''

Figure 1: 32 patients were excluded; assuming that the survey was done during the patients' stay in the ICU, how is it possible that 'the patients were not available'? Because the survey was only done in patients who were thought to be clear of mind, so being sedated / deliric can't be the reason; also, if you count all the exceptions I come up with a total of 37 and I don't think there will be an overlap in the different patient/surrogate groups.

Discretionary Revisions:
My personal opinion is, that 'shared-decision-making' about goals of care for ICU patients depends on more than "only" understanding CPR though this is certainly an important factor. Advance Care Planning (ACP), which consists of more than only making decisions about 'do not intubate, do not resuscitate', is also an important factor and these discussions / ACP should ideally be held in an earlier stage and not at the moment that the patient is critically ill and unable to participate in this difficult conversation. Is it an idea to touch the subject of ACP in the introduction (pg 2)?

If mentioning ACP in introduction troubles the clarity of the article, you could also bring it up in pg 9, at the end of the second paragraph. Because if this subject (ACP) is discussed at a time when the patient is a worthy partner in conversation he can indicate what is acceptable for him concerning QOL, what he is willing to invest (yes/no long stay in nursing home, yes/no renal replacement therapy, yes/no risk of brain damage after succesfull CPR, etc); 'we' (the medical staff) on the other hand have to inform the patient about prognosis, possibilities of
treatment (including the harmful side-effects) etc.

pg 8, 2nd paragraph: "factors associated with lower knowledge scores include": to clearly differentiate between knowledge scores achieved by residents on one side and patients / surrogates on the other side, I suggest to clarify it e.g. like "factors associated.... scores achieved by patients and their surrogates include: advanced age etc..."

pg 9, last paragraph, 3-4th line: 'Potential reasons to explain...literacy': perhaps it should be mentioned that a critically ill patient is not able to 'think clearly' (they can only focus on their shortness of breath / pain/ miserable state and later on in their ICU-stay on their recovery) and also can be emotionally affected when he is admitted to ICU; so I don't think they are very well able to make a consistent decision about yes / no CPR, unless they state that they've thought about it in the past and discussed it with family / GP. Understanding from the article, the patient was considered to be able to make his own medical decisions before the survey was done, so perhaps it's not that relevant; but take it into consideration to mention this...

pg 10, 2nd paragraph, last two lines: 'in a system where a majority of... decision making': you could discuss here that treatment limitations and their indications should first be discussed with senior consultant and that these decisions should not be made by the resident on his own; also could be mentioned that often it's a 'team-decision', meaning that medical staff discuss treatment limitations in daily patient rounds (in the Netherlands we have a 'paper round' each day with supervising doctors, residents, nurses, physical therapists and if necessary social workers). So I would state here, that the yes / no CPR conversation with patient / surrogates should be done by an experienced and knowledged doctor.

pg 10, 3rd paragraph, 7-8th line: "similarly, the survey... as the survey was not tested in this population": patients who only receive comfort care all already HAVE a DNR /DNI status, don't they? So it's not logical to bring it up again with family and surrogates. And it's logical that you didn't test the survey in this population. So you could consider to leave this passage out. Or explain why you didn't do it.

pg 11, first paragraph at the end: you could mention here advance care planning and how important that is in making CPR-decisions easier for all involved (doctors-patients-surrogates)

Table 2: CPR scores and discr validity; I assume that here are compared patients and surrogates on one side and the physicians on the other side. Perhaps it's good to make that clear because it makes the P-values more logical.

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'