

Peer Review

Review of: "Do Not Resuscitate Practices in ICU: A Descriptive Study"

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This is a nice start for an important paper looking at DNR practices in a large hospital in Saudi Arabia.

It needs significant editing at this time. As noted below, the authors must rework their results section and bolster their tables with more information, and they should be clear on their statistical tests and what they mean (i.e., what the comparison groups are).

Abstract

In the line with "average age..." you have "51 (22)," and it is unclear what the 22 represents; I assume standard deviation. Please clarify.

In the sentence "All secondary outcomes," please clarify what you mean by "statistically significant." Significantly associated with mortality?

You mention that they are done "without involving families," though you state previously that family discussions weren't always documented in the charts. Some cases may have involved family, but the clinicians failed to document the meeting. Be careful not to overstate your findings.

Introduction

In the third paragraph of your introduction, it would be good to have a sentence or two summarizing the state of the literature on DNR practices in Eastern countries, and why you feel data there, and especially from Saudi Arabia, might be different than elsewhere.

Methods

Timeframe and setting

Please add some more details on where the hospital is. Is it a tertiary/quaternary center? Is this a training hospital, and if so, how many trainees are in the unit? What are the ratios of physicians to patients (as this speaks to the time available to clinicians to have goals of care conversations)?

Inclusion and exclusion:

You say discharged with a DNR order. What if someone had a DNR order and then passed away in the ICU before discharge? Please clarify.

Make sure to be explicit about pregnant women's involvement.

In your statistical plan, please be clear about what your comparison is for your statistical tests.

Results

Please combine Table 1 and Figure 1. It is much more helpful to have percentages than the graph you present. Also, please include mortality rates as well.

In Table 1, do you have any other data on these patients that you feel might impact whether they were made DNR? Demographics (race/ethnicity, educational levels, primary language)? Lab values or prior diagnoses (especially end-stage renal disease, heart failure, underlying lung disease, dementia, HIV, etc.), or clinical factors (intubation during ICU stay, received pressors, etc.). Please include the APACHE score you mention in your methods. The Charlson Comorbidity Index is also a great score for overall disease severity. SOFA scores are also great for assessing disease severity.

This data will really help inform your work, as it helps to put into context which patients are being made DNR in your population so we can compare to other populations.

Again, you mention “the family being made aware,” but this is not what you mention in your methods. Please be clear that your data is “family involvement was not documented in the medical record in X%.”

In Table 2, what is the comparison for each of these? We need some exposure to compare the Yes and No populations. Always be explicit about what the denominator is for your percentages.

In Table 2, while I would prefer regression models (please see below), you can also break this data into 3 separate tables. Mainly, what was different between the groups that had early DNR and those who didn't? Those who were made DNR after CPR and those who weren't? etc. This will help answer readers' questions and allow you to offer better solutions or next steps in your discussion.

All tables/figures should have a title and a descriptor that allows the reader to understand the table without reading the text.

Ultimately, the goal of this paper seems to be to better describe the patients who are made DNR. I am confused as to why you did not include those who weren't made DNR as a comparator group. This would allow you to run regressions looking for factors associated with a DNR order or at least make basic

comparisons about who was or wasn't DNR (older patients, particular diagnoses, certain demographics, etc.). Regardless, with the data you have, I feel that you can run a linear regression of factors associated with the outcomes you chose (Early DNR, DNR after CPR, Family informed/not-informed). The more data you include on the patient backgrounds, the richer this analysis will be.

Discussion

Given my thoughts on the Results, you will have to significantly rework this section as well. The structure here is good, but please offer more citations and comparisons to other studies. You mention in the Introduction that there is limited data in Middle Eastern countries and Saudi Arabia in particular. How does your data compare to other regions? How does it compare to other Middle Eastern studies? You will really want to contextualize your study and highlight which parts of your work are different from previous work.

You state in your conclusions that there are "delays in the initiation of the DNR order." This seems to imply that the decision has been made, but the medical team delayed in putting it into the medical record. In this statement and others, please keep to exactly what your results show and be careful not to overstate your results (especially around family involvement, as noted elsewhere).

Declarations

Potential competing interests: No potential competing interests to declare.