Reviewer’s report

Title: Intravenous to oral antibiotic switch therapy: a cross-sectional study in critical care units

Version: 0 Date: 06 Jan 2019

Reviewer: Jaap Ten Oever

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INFD-D-18-02192

IV-oral switch is underappreciated and studied in the intensive care unit. This background makes the study of interest. The poor description and potentially the performance of the study, however, decrease the value of the study, which actually is a pity. Furthermore, the manuscript needs language editing.

Title

I prefer a title that reflects the intervention and design studied

Abstract

It is unclear from the abstract what the exact intervention was. See also my comments under methods.

Introduction

This study studied iv-oral switch in septic patients admitted to the ICU. IV-oral switch as part of a stewardship programme in the ICU should be the focus of the introduction. Not sepsis itself, as the authors have chosen to start the introduction with.

The second-to-last paragraph would be placed better after the sentence .. on a similar approach in critically ill patients (line 91).

The objective is too vaguely described. What exactly did the authors evaluate?
Methods

Please mention in the manuscript that the STROBE checklist is in the supplementary material. Furthermore, several items are missing in the manuscript. For example, design is not mentioned in the title. What is the authors’ hypothesis? Was it a consecutive sample of patients or a convenience sample? How many patients were excluded and why? Missing date? Etc.

I doubt this was a cross-sectional study. I would say it is a retrospective/prospective cohort study.

The reader would benefit from describing the intervention and the primary aim immediately after the first paragraph. And what exactly did you study? The safety (similar mortality) in the iv-oral switch groups compared to the group of patients that did not switch to oral administration? How were the two groups formed? If mortality is the primary outcome these groups should be formed out of the total group of patient that were deemed eligible for iv-oral switch by the stewardship team. This is not clearly described. What was advised in case of culture-negative infection? Was there a standard protocol?

Line 134-145: perhaps in a summarizing table?

Inclusion and exclusion criteria could be best placed after the intervention/primary aim (that should come as second). Mention here that you used the Sepsis-3 criteria.

Statistical analysis: it is unclear what was examined with the multivariable analysis. Why did the authors not use a Cox proportional hazards model, since this is not a RCT and the two groups are by definition unbalanced.

Results

It is not necessary to repeat most of the information that is presented in the tables as well. I would highlight the differences between the two groups.

Table 2: it is unclear what was tested with the multivariable analysis.

Discussion

Haven’t assessed it yet. The content should fit the design and results, but these are not yet clear to me.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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