Author's response to reviews

Title: Feasibility and impact of an intensified antibiotic stewardship programme targeting cephalosporin and fluoroquinolone use in a tertiary care university medical center

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Version: 5 Date: 25 March 2014

Author's response to reviews: see over
Freiburg, den 25.03.2014

Dear Editorial Board,

attached you find our revised manuscript with the title “Feasibility and impact of an intensified antibiotic stewardship programme targeting cephalosporin and fluoroquinolone use in a tertiary care university medical center”. We include a point-to-point response to the comments of the reviewers, which we found very helpful and we think have improved the paper.

Kind regards,
Johannes Borde, MD
Reviewer 1:

Please explain the intervention carried out more in detail. This is the core of the paper and we do not know with the information provided. The details, such as who revised the guidelines (only the steering committee of the study or in association with other experts?), how many people attended the lectures you set up?

In the revised version of the manuscript we report the components of the intervention in more detail – internal guidelines and pathways, prospective audit with intervention and feedback, academic detailing, educational events etc. We explain the multidisciplinary revision of internal guidelines. The team included infectious disease physicians, clinicians and pharmacists. We have no detailed statistics on attendance of educational sessions.

It is not clear to me how many beds were involved in this study. You comment first that the intensified stewardship intervention was focused on a 300-bed department but in the Methods section you mention a total of 400 beds in the surgical critical care and 250 extra beds in the ENT department. Please make all this information clearer.

We clarified this point in the revision. The intervention was focused on the 300-bed medical service: Several control departments were used. Together, these made up 750 beds.

Another aspect that warrants more discussion is why you wanted a reduction of 30% in the use of cephalosporins and fluoroquinolones? Please explain more in depth.

We chose >30%, after a benchmark analysis showed us, use density levels for cephalosporins and fluoroquinolones at large hospitals were >30% lower than at Freiburg university hospital. We concluded from this data that a reduction by >30% should be feasible and should be our goal.

Define ABS the first time it appears in the text.

Antibiotic stewardship (ABS) is now defined the first time it appears in the abstract and the main manuscript.

Write the journals as recommended by Pubmed.

The references have been revised using Mendeley style guide “BMC infectious disease”.

Reviewer 2:

It is important for the author to describe the detail of the control program. Although the authors described the provision of lectures, and short term briefings, as a part of the control program, it is well-known that staff education alone is least effective. The authors should describe the detail on the audit such as any use of immediate concurrent feedback? As for the bedside infectious disease consultation, can the ID physician change the antibiotic prescription at the bedside? or the ID physician only
make recommendation to the primary care team? If so, what is the compliance of the primary care team to the recommendation by ID physician?

The manuscript contains now a section explaining in more detail the ABS intervention.

Is there any reason to explain the reduction of carbapenems during intervention despite increasing rates of EBSL-producing organisms since 2010?

The use of carbapenems dropped since piperacillin-tazobactam was more often used as a salvage regimen.

Is there any reason to explain the non-significant reduction of overall antibiotic usage density in the control departments?

In the control departments no intensified ABS intervention took place. There was, however, some (educational) “contamination” from the medical service project. Also, transfers from the medical service to other departments may have “contaminated” the antibiotic policy in those departments if the patients were transferred while on antibiotics.

Please specify the commonly used drug items under the category of penicillin, cephalosporin, and fluoroquinolones in the method.

The drugs were specified in the material and methods section.

Add footnote in Table 1 for BLI.

A footnote was added in table 1 explaining BLI.

Please specific RDD/100 as RDD per 100 patient-day in the method.

Changes in the material and methods section were done as proposed.