Reviewer’s report

Title: Characteristics of febrile urinary tract infections in older male adults

Version: 0 Date: 09 Jun 2019

Reviewer: Kathleen Hunter

Reviewer's report:

Thank you for the opportunity to review this manuscript. The topic, urinary tract infection in men, is clinically important.

General comments

A careful read through to correct spelling errors is needed. For example "Bacteriemia" and "preassure" in Table 1 lines 7 and 37, "piuria" on page 11 line 36; ITU line 14 in the first paragraph in the discussion.

Review by an English language editor would help the flow and address some odd phrasing in places.

Use consider using the term lower urinary tract symptoms (LUTS) as endorsed by the International Continence Society rather than "mictional" symptoms, which is a less familiar term. Please make it clear that you are referring to the symptoms of urinary urgency, frequency and/or dysuria when you discuss the 'mictional" symptoms.

Please consider avoiding the use of the word "elderly", which is repeated many times in the paper. This is a term that is considered ageist by many, and the terms older adult, older person and older people are more acceptable. Some journals have asked authors to refrain from using this term.

Abstract

Identify where the participants were recruited from in the methods section of the abstract.

Methods

Study design

Line 46 - you describe using data from men with a "community" FUTI, yet on the next page line 53 introduce the idea that some of the UTI's were categorised as health-care associated, giving criteria for this. I suggest you delete the word "community" in reference to the FUTI as it is confusing. Use the terminology under results where you describe including males diagnosised with an FUTI in the ED

Line 5 next page in study design - You identify that your diagnostic criteria included the symptoms of urinary urgency, frequency and/or dysuria. Urinary urgency and frequency are very common symptoms in older males associated with conditions other than a UTI. Please clarify if you identified worsening or new onset urinary urgency and or urinary frequency or just the presence of these symptoms.

Line 10 next page in study design - you also introduce the idea of "nosocomial FUTI" as a UTI occuring 48 hours after admission. This is confusing as you stated you included men who presented in
the emergency department with a FUTI. Did you also look at records of inpatients? If not, delete the piece on nosocomial infections.

Study population, description of measures and definitions
Second paragraph line 2 - you included those with indwelling catheters "in place or removed 48h before the FUTI episode". How many of these were long term (more than 4 weeks) or short term catheters (one that had been in place for a few days or less than 4 weeks)? This is important because the organisms that tend to colonize the bladder in people dependent on a long term indwelling catheter are different than those that tend to cause Catheter Associated Urinary Tract Infections in short term catheters. As well, most UTI associated with a short term catheter are due to a single organism, while UTIs associated with long term catheters involve multiple organisms - often drug resistant. Including long term catheters could affect your results and should be clearly accounted for in terms of who was included and later, in the analysis, how this could affect results.

Third paragraph - were the urinary samples all taken from newly inserted urinary catheters (or an newly changed long term catheter), or could some have been taken from long term catheters in place for some weeks? This could influence results.

Statistical analysis
line 15 - it is incorrect to use the word "qualitative data" as no qualitative data (e.g. interviews or other narrative data) was collected. I think you mean that you used descriptive statistics to summarize demographic data and data on patient characteristics. This needs to be corrected.

Results
Did you do any separate analysis of those with long term vs short term indwelling dwelling catheters? This could be very informative. It would also be worth considering the exclusion of those with long term indwelling catheters as they likely represent a unique group, different from those who are not catheter dependent.

Discussion
I again go back to the issue of having included those with indwelling catheters at the time of presentation to the ED without differentiating short term from long term catheters.

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.

Yes

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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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