



SDI Review Form 1.6

PART 1:

Journal Name:	British Microbiology Research Journal
Manuscript Number:	MS: 2012/BMRJ/2033
Title of the Manuscript:	Antimicrobial Resistance in Pathogens Causing Pediatrics Bloodstream Infections in Madinah Maternity and Children's Hospital, Saudi Arabia

General guideline: Reviewers are requested to follow these guidelines during review: *(Note: Title of different sections as proposed below may differ in case of review paper / case reports)*

- Introduction *(Is the problem/objective of this study original, important and well defined?)*
- Materials & methods *(Kindly comment on the suitability of the methods. Sufficient details of the methods should be provided to allow peers to evaluate and/or replicate the work)*
- Results & discussion *(Kindly comment on: 1. Are the data well controlled and robust? 2. Authors should provide relevant references during discussion. 3. Discussion and conclusions should be based on actual facts and figures. Biased claims should be pointed out. 4. Are statistical analyses must for this paper? If yes, have sufficient and appropriate statistical analyses been carried out?)*
- Conclusion *(Is the conclusion supported by the data, discussed inside the manuscript? Conclusions should not be biased and should be based on the data, presented inside the manuscript only)*
- Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?
- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part and write here 'Corrected'/ if not agreed, give suitable justifications)
<u>COMPULSORY REVISION</u> comments	This is an interesting, comprehensive, and well done analysis and review of the data from Medina Maternity and Children's Hospital in Saudi Arabia. My comments on the manuscript are as follows: We are all concerned about potential outbreaks of vancomycin resistant Staphylococcus aureus. Fortunately they remain very rare and isolated. You have two cases in this paper, yet you discuss it very little. Can you elaborate? It is my impression that MRSA and VRSA are universally resistant to cephalosporins, yet you report 100% cephalothin susceptibility. Could you have quality control issues in the microbiology lab? There are two instances in the paper where you use the phrase "cultural characteristics." For instance, in the abstract: "Microorganisms were identified by cultural characteristics, Gram stain and biochemical profiles." I would suggest rewording to: "characteristics on culture..." as the phrase "cultural characteristics" has a different English meaning – "what distinguishes a certain group of people from another. (Race, religion, etc)."	Many thanks. I put the resistance pattern of MRSA (line 152, table 3). The previous result was for other <i>S. aureus</i>. I modified it to colony morphology in the text.
<u>Minor</u> REVISION comments	Can you better describe in the manuscript what the "Minimal Care Unit" does since it has such a high mortality percent. Is it for hospice-type patients? It would be enlightening to have the data broken out as community-acquired blood stream infection vs. hospital-acquired. I imagine the vast majority of the BSIs are hospital-	Exactly, MCU is for hospice-type patients. I remembered this and explained the high mortality rate in line 197



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	acquired, and these would be amenable to interventions to reduce the rate – central line insertion protocols, daily chlorhexidine baths in the non-infants, protocolized nursing central line insertion and hub care, central line removal, etc. For ease of analysis, I think you could just define a cut-off of blood culture collection time of 48 hours post-admission to separate community vs. hospital-acquired. (community < 48h; hospital > 48h) The significant gender difference in rates of BSIs is noteworthy. Can you make a comment about the rates of hospitalization for the two genders? Are girls just hospitalized less, or are the boys more likely to get an infection? Consider omitting the paragraph regarding the NICU admission diagnoses. This information seems fairly standard and doesn't add much to the manuscript. The fact of antibiotic susceptibility testing was only performed on a relatively small sample of the isolates is important, and contrasts to our usual practice in the USA. Can you make a comment? Is it thought not necessary? Is it a cost issue? I think the data show that all BSIs deserve susceptibility testing on at least the first isolate. Will you be changing this practice? In your conclusion, you state that the rate of BSIs in the neonates is too high and that they deserve special attention to the quality of care. This is a very vague statement. Can you elaborate on steps undertaken to reduce these infectious setbacks?	This is an excellent idea. I divided the cases to community and hospital. Line 135 Corrected, line 184 Sorry. But at which line to omit it? Here in KSA also, antibiotic susceptibility testing is routinely performed on all the isolates. But as we was in a hurry to publish the paper we put the results of some representative organisms. Now, we completed the data of all isolates and reformulated the tables (4&5). Thanks a lot for this essential comment. The conclusion was corrected.
<u>Optional/General</u> comments		The paper was revised again and reformulated