



SDI Review Form 1.6

Journal Name:	British Microbiology Research Journal
Manuscript Number:	Ms_BMRJ_25360
Title of the Manuscript:	METHICILLIN-RESISTANCE IN <i>Staphylococcus aureus</i> ISOLATES FROM PATIENTS ADMITTED AT SPECIALIST HOSPITAL OKITIPUPA, ONDO STATE, WESTERN NIGERIA.
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	The aims of the present study were to determine the rate of methicillin resistance and antibiotic resistance patterns of <i>S. aureus</i> isolated from patients hospitalized at State Specialist Hospital, in Nigeria. The authors used as an indicator of MRSA isolates resistance to oxacillin. 100% of the isolates showed resistance against this antibiotic, while against other beta-lactam antibiotics, especially cephalosporins, showed various degree of resistance, e.g. cefuroxime (70.6%), ceftazidime (64.7%), and ceftriaxone (23.5%). Nowadays, the isolates are classified as MRSA due to 1. the presence of <i>mecA</i> gene (encoding PBP'2 protein, which gives resistance of the MRSA isolates against all clinically used beta-lactam antibiotics) and 2. phenotypical resistance to beta-lactams, including oxacillin and cephalosporins (mainly cefoxitin). In this study most of the isolates were sensitive to ceftriaxone (equivalent of cefoxitin), what suggest that these isolates showed resistance to oxacillin due to the hyper-production of beta-lactamase enzymes (and not the presence of PBP'2 protein). Such isolates are called BORSA (Borderline <i>S. aureus</i> isolates). These isolates are resistant to oxacillin, but the MIC for oxacillin is very low, in comparison with MRSA. So, in my opinion, authors should check if the examined seventeen <i>S. aureus</i> isolates harbor <i>mecA</i> gene or PBP'2 protein. If not, these isolates should be classified as BORSA. To confirm the presence of BORSA isolates (hyper-production of β-lactamase) I recommend Cefinase test.	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		

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