



SDI Review Form 1.6

uPART 1:

Journal Name:	
Manuscript Number:	2013 BMRJ 4327
Title of the Manuscript:	CORRELATION OF H2O2 PRODUCTION OF LACTOBACILLUS SPECIES WITH NUGENT SCORES OF YOUNG NIGERIAN WOMEN
Type of the Article	Research paper

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 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 <i>(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)</i>
<u>Compulsory</u> REVISION comments	The division of lactobacilli in anaerobic and aerobic is, to the reviewer opinion, not necessary as no additional studies showed that it is an important factor on hydrogen peroxide production. The number of isolates is also much too low to make this separation in association with the Nugent score. Student T test (and any other test) cannot be made with such small group of n=1 or n=5 (Table 4). Consequently, the authors should not make this distinction in the text, remove the associated Table 1, and combine Table 2 and Table 3. Furthermore, Fig. 1 is not necessary as it is a repetition of Table 2. So the authors should only have two tables, one for the proportion of isolates producing hydrogen peroxide in relation to Nugent score and one with the concentration of hydrogen peroxide production in relation to Nugent score. Furthermore instead of a T test the author should consider a test evaluating correlation between Concentration of hydrogen peroxide and Nugent score (such as Spearman or Pearson). The author should not use "rate of production" but rather "Proportion of isolates producing hydrogen peroxide".	Previous studies have shown that anaerobic lactobacilli do not produce H₂O₂. In fact, in a previous study (our reference 3) distinction between anaerobes and facultative anaerobes was based on H₂O₂ production. We think our finding is noteworthy because it is contrary to this. Even, if our sample size is too low to draw a strong conclusion, which prevented us from doing so, this finding can be used to formulate a hypothesis for further studies. Table 1 has been deleted as advised. Tables 2 and 3 cannot be merged because they are presenting different types of results. Figure 1 has also been deleted. Tables 3 and 4 which are showing the same types of results have been merged (now Table 2). Statistical analysis redone with ANOVA and Spearman correlation coefficient.



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	Otherwise it sound like the amount produced in a certain time. Line 65: It says 97 isolates were isolated from 97 women. So was it 1 isolate per women, or does it varies between women. This information should be included. Line 67: Describe on which medium the swab were cultured. The discussion is difficult to follow and contains a lot of speculations. The results of the study should be more thoroughly discussed in relation to other papers showing inverse correlation between hydrogen peroxide production and BV (Hawes <i>et al.</i> 1996; Vallor <i>et al.</i> 2001) and also recent papers O'Hanlon et al 2010, 2011 describing that vaginal concentration of hydrogen peroxide in the vagina is not sufficient to kill BV associated bacteria. This is also recently discussed in Pendharkar <i>et al.</i> 2013. Line 164: Topical lactobacilli application has been shown to reduce BV at least as adjunct therapy to antibiotic. It may not be dependant of hydrogen peroxide production but that doesn't mean lactobacilli cannot be effective as probiotic. There is numerous spelling or grammatical mistakes. The manuscript would benefit greatly from editing by an expert in writing scientific English.	Done. 1 isolate per woman, information now included. Same media was used to subculture them. Now included. The discussion has been revised. All mistakes corrected.
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<u>Minor</u> REVISION comments	Everywhere in the text: Change flora or microflora for biota or microbiota Write <i>Lactobacillus</i> and lactobacilli Put a dash when including numbers (ex. Forty-two) Line 19. Abstract. Methodology: Indicate from how many women with and without BV, the 97 isolates were isolated. Indicate how BV was diagnosed. Line 34: should read "...the vagina by other bacterial species..." Line 42: Include a reference describing acceptance of Nugent score. Line 46: <i>Mobiluncus</i> (in italic) Line 67: Include a reference how to calculate Nugent (such as Nugent et al <i>J Clin Microbiol</i> 1991)	Done. Done. Done. Done. Done. Done. Done. Done.
<u>Optional/General</u> comments		