



SDI Review Form 1.6

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| Journal Name: | Journal of Advances in Microbiology |
| Manuscript Number: | Ms_JAMB_45762 |
| Title of the Manuscript: | Comparative study of Candidiasis in pregnant and non-Pregnant women attending Ibrahim Badamasi Babangida Specialist Hospital and General Hospital, Minna Niger state |
| 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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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



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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) |
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| Compulsory REVISION comments | <p>This paper contributes considerably to knowledge in the field of reproductive health and gynaecology. In this manuscript, the author(s) assessed and compared the prevalence of vaginal candidiasis among pregnant and non-pregnant women attending Ibrahim Badamasi Babangida Specialist Hospital and General Hospital, Minna Niger state, Nigeria. A total of 80 women: 40 pregnant women and 40 non-pregnant women were screened for vaginal candidiasis using standard methods including: colonial morphology (macroscopic characteristics), microscopy (Gram staining and Lactophenol cotton blue staining) and biochemical (Sugar fermentation) tests. Confirmation of <i>Candida albicans</i> was done with the Germ Tube Test.</p> <p>I recommend acceptance of this manuscript after addressing the following critical issues:</p> <ul style="list-style-type: none"> i) The manuscript needs to be checked and edited for errors in grammar and syntax. ii) In the abstract, author(s) should represent the proportion of women with vaginal candidiasis in percentage (%) and state very clearly if there was any significant difference in the occurrence of vaginal candidiasis among the pregnant and non-pregnant women, and between the two study centres: General Hospital and IBB Specialist Hospital. iii) In the introduction (Background to the study), authors should dwell more on vaginal candidiasis, rather than oral candidiasis and justify the same. iv) More information on the epidemiology of vaginal candidiasis (not treatment) among the study population is needed in the introduction. This will put the manuscript into context and allows readers outside the field to understand the purpose and significance of the study. Consequent upon the above, authors should state the existing gap in knowledge which they intend to fill through their research. v) Author(s) should state the nature or type of study design, as well as the duration of the study. It is very important. vi) Description of the study area should be clearly stated under methodology. Authors should provide the coordinates of the geographical location where the research was carried out. | <p>Corrections made in line with the Reviewer's comment</p> <p>Samples space size was adopted in the light of the follow-on processes associated with the identification Processes.</p> <p>Manuscript was a Laboratory research work conducted within a period of 90days</p> <p>Abstract, introduction corrected</p> <p>Referencing in the Discussion all sited properly</p> |



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| | <p>vii) How was the sample size calculated? Author(s) should provide information on sample size determination.</p> <p>viii) Did author(s) obtain ethical clearance? Authors should please provide ethical approval committee's name and ethical approval registration number.</p> <p>ix) Author(s) should state if and how they obtained the demographic information (e.g age, trimester etc) of the study participants.</p> <p>x) It is worrisome to note that the author(s) did not subject their results (data) to any form of statistical analysis. If they do, they should state the statistical tool used and the p-values obtained, if any.</p> <p>xi) The discussion is not robust enough. Please expatiate.</p> <p>xii) References are old and poorly sighted. To fully support their study and keep it reliable and time-efficient, I suggest that Author(s) should cite more relevant references of the recent three years in the discussion section. Authors should also ensure that references are correctly numbered within text and properly arranged in the reference section according to the journal format.</p> <p>xiii) Stakeholders who contributed towards the success of the research should be dully acknowledged, except if there is none.</p> | |
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| <p>Minor REVISION comments</p> | <p>TITLE</p> <p>Line 3-4: Comparative study of vaginal candidiasis in pregnant and non-pregnant women attending Ibrahim Badamasi Babangida Specialist Hospital and Hospital, Minna Niger state, Nigeria General</p> <p>ABSTRACT</p> <p>Line 8-23: Candidiasis is a fungal infection of the mouth or vagina due to the presence of any type of <i>Candida</i> species (a type of yeast) [2]. When it affects the mouth, it is commonly called thrush. Vaginal candidiasis is common during pregnancy and may impact negatively on the health of the woman. The aim of this study is to determine and compare the prevalence of vaginal candidiasis among pregnant and non-pregnant women attending Ibrahim Badamasi Babangida (IBB) Specialist Hospital and General Hospital in Minna, Niger state, Nigeria. High vaginal swab (HVS) were collected from 20 pregnant and 20 non-pregnant women attending in General Hospital, Minna and IBB Specialist Hospital, Minna, Niger state, Nigeria and screened for the presence of yeasts associated with vaginal candidiasis. Sabouraud Sabouraud Dextrose Agar (SDA) incorporated with chloramphenicol was used to isolate the <i>Candida</i> species in the HVS samples. Identification, Characterization and Biochemical test were used for confirmation of the <i>Candida</i> isolates. <i>Candida</i> isolates were identified and characterized using standard methods including: colonial morphology (macroscopic characteristics), microscopy (Gram staining and Lactophenol cotton blue staining) and biochemical (Sugar fermentation) tests. Confirmation of <i>Candida albicans</i> was done with the Germ Tube Test. Thirteen (13) samples tested positive to for candida species infection. The species identified were <i>Candida albicans</i> (9), <i>Candida krusei</i> (2), <i>Candida tropicalis</i> (1), and <i>Candida pseudotropicalis</i> (1) for pregnant women in General Hospital. Ten (10) samples taken from pregnant women in Ibrahim Babangida Specialist Hospital</p> | <p>All correction made.</p> |
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| | <p>showed were positive reactions for Candida species infection. Nine (9) out of the twenty (20) samples collected from non-pregnant women in General Hospital had were Candida species infection, while three (3) out of the twenty (20) samples from non-pregnant women from Ibrahim Babangida tested positive for to Candida species infection. Biochemical analysis shows each <i>Candida</i> isolate's ability to utilize different sugars during Sugar Fermentation Test. Germ Tube Test was used to identify and differentiate <i>Candida albicans</i> from other species of _____ <i>Candida</i>.</p> <p>Line 24: Keywords: Pregnancy, Vaginal candidiasis, High vaginal swab, SDA, Candida species</p> <p>Line 39: More than 20 types of Candida species can cause infection, with <i>albicans</i> being the most common <i>Candida</i></p> <p>Line 56: high risk, antifungal medications may be used preventatively for prophylaxis [11].</p> <p>MATERIALS AND METHOD</p> <p>Line 64-67: Not important</p> <p>Material used in this research were microscope, swab stick, slide hydrogen peroxide, normal saline, petri dishes, test tubes, crystal violet, ethyl alcohol, oil immersion, safarine, SDA (Sabouraud dextrose agar).</p> <p>Rather state the study design and duration of study here.</p> <p>Line 70: Please provide the coordinates of the geographical location where the</p> | |
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| | <p>research was carried out.</p> <p>Line 83: The SDSA suspension was sterilized by autoclaving at 121°C for 15</p> <p>Line 95: IDENTIFICATION AND CHARACTERISATION OF CANDIDA ISOLATES</p> <p>Line 98: slide and Gram-stained to use study the morphological characteristics of the organism.</p> <p>Line 101-102: The Gram staining was performed as described previously by Cheesbrough [Insert reference number], Oyeleke and Manga [Insert reference number].</p> <p>Line 104-105: Suspected colonies of Candida species Listeria monocytogenes bacteria colonies on any of the agar plates were emulsified</p> <p>Line 114: examined microscopically using oil immersion objective lens (x100). Candida species were seen as Gram positive yeast-like cells under the microscope.</p> <p>Line 115: BIOCHEMICAL (SUGAR FERMENTATION) TEST</p> <p>Line 115-132 Please take note, the procedure for Lactose phenol cotton blue staining should come before biochemical test</p> <p>Line 134-135: GERM TUBE TEST This is a confirmatory test for the presence of Candida albicans in a sample.</p> <p>Line 171-185: In Tables 1-4, it is important for author(s) to show the proportion of participants in percentage (%) as shown in the template below: study</p> | |
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| Age group (years) | Total numbers of Samples Collected | Numbers of Positives Samples (N) | Percentage Positive (%) | Numbers of Negative Samples (N) | Percentage Negative (%) |
|-------------------|------------------------------------|----------------------------------|-------------------------|---------------------------------|-------------------------|
| 11-20 | | | | | |
| 21-30 | | | | | |
| 31-40 | | | | | |
| 41-50 | | | | | |
| Total | | | | | |

Line 197: **Table 7. Morphological and Biochemical (Sugar Fermentation)**

Characteristics of the Candida isolates.

NB: Author(s) may wish to adopt the table template presented below, it aids easy comparison of the characteristics of the Candida isolates at a glance.

| Candida Isolates | Morphological Characteristics | Sugar Fermentation Test | | | | | |
|----------------------------|-------------------------------|-------------------------|---------|---------|-----------|----------|---------|
| | | Glucose | Maltose | Lactose | Galactose | Fructose | Sucrose |
| <i>C. albicans</i> | | | | | | | |
| <i>C. krusei</i> | | | | | | | |
| <i>C. tropicalis</i> | | | | | | | |
| <i>C. pseudotropicalis</i> | | | | | | | |

Line 215: trend for **re-occurrence** during pregnancy as a result of the increased level of estrogens and **corticoid**, the



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| | <p>Line 223-225: However, these organisms have been reported in cases of mycosis [Insert reference numbers here, e.g 9-12] (Haude <i>et al.</i>, 1980, Talare and Talare 1996). Haude <i>et al.</i>, [Insert reference number] reported that <i>C. pseudotropicalis</i> causes oral or genital thrush but rarely meningitis or encephalitis.</p> <p>Conclusion Line 228-232: Please refine, not good enough.</p> | |
| <p>Optional/General comments</p> | | <p>Noted</p> |

PART 2:

| | <p>Reviewer's comment</p> | <p>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></p> |
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| <p>Are there ethical issues in this manuscript?</p> | <p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p> <p>Yes, authors should provide ethical approval registration number.</p> <p>Authors should declare whether or not that written informed consent was obtained from the participants.</p> | |