

# **The patterns and occupational distribution of hormonal abnormalities among men investigated for infertility in some centers in the southwest, Nigeria**

Muyiwa Adeleye Moronkeji, Mathias Abiodun Emokpae, Timothy Ayodele Ojo, Ruth Efe Moronkeji, Lawrence Tayo Ogundoku

Corresponding author  
Mathias Abiodun Emokpae,  
*Department of Medical Laboratory Science, School of Basic Medical Sciences, University of Benin, Benin City, Edo State, Nigeria*

---

Handling editor:  
Michal Heger  
*Department of Pharmaceutics, Utrecht University, the Netherlands*  
*Department of Pharmaceutics, Jiaying University Medical College, Zhejiang, China*

Review timeline:

Received: 2 October, 2020  
Editorial decision: 8 December, 2020  
Revision received: 9 January, 2021  
Editorial decision: 26 January, 2021  
Published online: 12 March, 2021

---

1<sup>st</sup> Editorial decision  
08-Dec-2020

Ref.: Ms. No. JCTRes-D-20-00110  
The Patterns and Occupational Distribution of Hormonal Abnormalities among Men Investigated for Infertility in some Centers in the Southwest, Nigeria.  
Journal of Clinical and Translational Research

Dear Professor Emokpae,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.

Your revision is due by Jan 07, 2021.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1: 1/ In the abstract:

In Methods: follicule stimulating hormone (FSH), Luteinizing hormone (LH)

2/There is a discrepancy in the hormonal abnormalities described in the abstract, the table 6 and the results.

3/ In the exclusion criteria smokers and alcoholics were excluded while cited in the results in table 2 ?

Reviewer #2: Dear authors,

Thank you for submitting your work to the Journal of Clinical and Translational Research. Please modify your manuscript according to the following:

1. The methods section does not specify how the data presented in Tables 1 and 2 were collected. If this was a questionnaire, the questionnaire should be provided along with the manuscript as supplemental information.
2. It is indicated in section 2.4 that 400 male subjects were included in the study. However, the exclusion criteria were smoking and alcohol use, amongst others, which according to Table 2 would have eliminated at least 62 participants (alcohol users). This would bring the number of participants to 338, making the study underpowered according to section 2.7. Similarly, were the inclusion criteria infertility or individuals who came to the clinic for an infertility test? The way it is written now in section 2.2, inclusion was based on the latter. These issues should be harmonized.
3. How did you exclude on STIs, hypertension, varicoceles? Were the appropriate tests and medical examinations performed before inclusion?
4. What is meant by antioxidant supplementation? Drinking a glass of vitamin C-rich orange juice qualifies as antioxidant supplementation. Please be more specific in your descriptions of pertinent matters. This also applies to some variables in Table 2, such as the definitions of smoker and alcohol user (is 1 cigarette per week considered a smoker?).
5. For completeness, correlation analyses should also be performed between some of the key variables in Tables 1 and 2 and the clinical outcomes (GnRH, FSH, LH, test., prolactin) in both fertile and infertile men. Based on these outcomes, the authors should run a subsequent analysis to determine whether any of the variables in Tables 1 and 2 are independent predictors of abnormal hormonal levels.
6. Table 5 legend should specify that the data set pertains to infertile men.
7. To improve legibility, Table 6 should use a boldface font for values that are out of range,

whereby values below range should be indicated in bold red and values above range should be indicated in bold blue.

8. After completing the more extensive statistical analysis (see point 5), the authors should be more elaborate in addressing the data and links between data. The way the Results section is currently structured provides too little insight from the text, while the reader is forced to gain insight into the data by thoroughly studying the tables (mainly Tables 4-6). There is so much more useful information to be presented.

9. The Discussion section focuses heavily on aberrant endocrinology as a root for infertility. However, as pointed out in Table 5, and overwhelming majority of men was infertile yet had normal hormone levels. The authors should add equal weight to this phenomenon in their discussion and indicate what could be the causes of infertility.

10. The manuscript should be proofread to eliminate linguistic inconsistencies and grammar and spelling errors.

Thank you in advance for your efforts,

Michal Heger  
Editor

---

Authors' response

Reviewers' comments: Ref.: Ms. No. JCTRes-D-20-00110

The Patterns and Occupational Distribution of Hormonal Abnormalities among Men Investigated for Infertility in some Centers in the Southwest, Nigeria.

Journal of Clinical and Translational Research

Reviewer #1: 1/ In the abstract:

In Methods: follicle stimulating hormone (FSH), Luteinizing hormone (LH)

2/There is a discrepancy in the hormonal abnormalities described in the abstract, the table 6 and the results.

**Response: Discrepancy corrected please.**

3/ In the exclusion criteria smokers and alcoholics were excluded while cited in the results in table 2 ?

**Response: Those who smoke and consume alcohol were excluded.**

Reviewer #2: Dear authors,

Thank you for submitting your work to the Journal of Clinical and Translational Research. Please modify your manuscript according to the following:

1. The methods section does not specify how the data presented in Tables 1 and 2 were

collected. If this was a questionnaire, the questionnaire should be provided along with the manuscript as supplemental information.

**Response: Questionnaire was used and is attached please**

2. It is indicated in section 2.4 that 400 male subjects were included in the study. However, the exclusion criteria were smoking and alcohol use, amongst others, which according to Table 2 would have eliminated at least 62 participants (alcohol users). This would bring the number of participants to 338, making the study underpowered according to section 2.7.

**Response: Smokers and alcohol consumers are excluded. See text**

Similarly, were the inclusion criteria infertility or individuals who came to the clinic for an infertility test? The way it is written now in section 2.2, inclusion was based on the latter. These issues should be harmonized.

**Response: Thorough physical and medical examinations were conducted on the participants by the attending physicians. Only those who met the inclusion criteria were recruited in the study. They consist of males aged 21-60years who were referred to the laboratory for semen analyses as part of their investigation for infertility.**

3. How did you exclude on STIs, hypertension, varicoceles? Were the appropriate tests and medical examinations performed before inclusion?

**Response: Appropriate physical and medical examinations were conducted.**

4. What is meant by antioxidant supplementation? Drinking a glass of vitamin C-rich orange juice qualifies as antioxidant supplementation. Please be more specific in your descriptions of pertinent matters. This also applies to some variables in Table 2, such as the definitions of smoker and alcohol user (is 1 cigarette per week considered a smoker?).

**Response: Individuals on antioxidant food supplements and those who admitted to smoking and alcohol consumption were excluded.**

5. For completeness, correlation analyses should also be performed between some of the key variables in Tables 1 and 2 and the clinical outcomes (GnRH, FSH, LH, test., prolactin) in both fertile and infertile men. Based on these outcomes, the authors should run a subsequent analysis to determine whether any of the variables in Tables 1 and 2 are independent predictors of abnormal hormonal levels.

**Response: Further statistical analyses were done on the data and new table 7 included.**

6. Table 5 legend should specify that the data set pertains to infertile men.

**Response: Specified as sex hormone**

7. To improve legibility, Table 6 should use a boldface font for values that are out of range, whereby values below range should be indicated in bold red and values above range should be indicated in bold blue.

**Response: Boldface used.**

8. After completing the more extensive statistical analysis (see point 5), the authors should be more elaborate in addressing the data and links between data. The way the Results section is currently structured provides too little insight from the text, while the reader is forced to gain

insight into the data by thoroughly studying the tables (mainly Tables 4-6).  
There is so much more useful information to be presented.

**Response: The section has been re-written.**

9. The Discussion section focuses heavily on aberrant endocrinology as a root for infertility. However, as pointed out in Table 5, and overwhelming majority of men was infertile yet had normal hormone levels. The authors should add equal weight to this phenomenon in their discussion and indicate what could be the causes of infertility.

10. The manuscript should be proofread to eliminate linguistic inconsistencies and grammar and spelling errors.

**Response: Improved please see text**

---

2<sup>nd</sup> Editorial decision  
26-Jan-2021

Ref.: Ms. No. JCTRes-D-20-00110R1

The Patterns and Occupational Distribution of Hormonal Abnormalities among Men Investigated for Infertility in some Centers in the Southwest, Nigeria.  
Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Comments from the editors and reviewers: