

## REVIEWER'S REPORT

Manuscript No.: IJAR-55213

Title: **Thyroid Profile Changes in Pregnancy (T3, T4, TSH)**

### Recommendation:

Accept as it is .....

Accept after minor revision.....x.....

Accept after major revision .....

Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality			X	
Techn. Quality		x		
Clarity			X	
Significance		x		

Reviewer Name: Dr. Mohammad Nadeem Khan

## Detailed Reviewer's Report

### General Comments

The manuscript presents a comparative cross-sectional study evaluating changes in thyroid hormones (T3, T4, and TSH) among pregnant and non-pregnant women. The topic is clinically relevant, especially in the context of maternal–fetal health, and addresses an important diagnostic challenge related to physiological thyroid alterations during pregnancy. The manuscript is generally well-structured, clearly written, and supported by appropriate background literature. The findings align with established endocrine physiology and reinforce the need for trimester-specific reference ranges.

### Title and Abstract

The title accurately reflects the scope and objective of the study. The abstract is concise and clearly summarizes the background, methodology, key findings, and conclusions.

### Suggestions

- Consider explicitly mentioning the *comparative cross-sectional design* in the abstract for methodological clarity.
- Minor grammatical polishing may further improve readability.

### Introduction

The introduction provides adequate background on thyroid physiology, pregnancy-related hormonal changes, and clinical implications. The rationale for the study is well justified, and the objectives are clearly stated.

### Strengths

- Clear explanation of HCG and estrogen effects on thyroid function.
- Appropriate emphasis on fetal dependence on maternal thyroid hormones in early pregnancy.

# International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

[www.journalijar.com](http://www.journalijar.com)

---

## REVIEWER'S REPORT

- Adding 1–2 recent guideline-based references (e.g., ATA or Endocrine Society updates) would strengthen the contextual relevance.

### Review of Literature

The literature review appropriately cites landmark and clinically significant studies supporting pregnancy-related thyroid changes.

### Strengths

- Well-aligned references supporting physiological mechanisms.
- Logical flow from hormonal regulation to clinical consequences.
- Reference formatting should be standardized according to the journal's guidelines, including complete citation details (year, volume, pages).

### Materials and Methods

The methodology is clearly described and appropriate for the study objectives.

### Strengths:

- Clearly defined inclusion and exclusion criteria.
- Use of CLIA for hormone estimation is appropriate and standard.
- Statistical analysis methods are adequate for comparative evaluation.
- Specify the trimester distribution (1st vs. 2nd trimester) of pregnant participants, as thyroid hormone levels may vary across trimesters.
- Ethical approval and informed consent details should be explicitly stated if not already included elsewhere.

### Results

The results are clearly presented and supported by descriptive statistics, tables, and graphical representation.

### Strengths

- Data presentation is straightforward and easy to interpret.
- Observed hormonal trends are consistent with known physiological changes.
- Including exact *p-values* rather than only stating statistical significance would improve scientific rigor.

### Discussion

The discussion appropriately interprets the findings in light of existing literature and explains the physiological basis for observed changes.

# International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

*www.journalijar.com*

---

## REVIEWER'S REPORT

### Strengths:

- Strong linkage between results and hormonal mechanisms.
- Clear clinical implications are outlined.
- Briefly discuss potential limitations, such as sample size or lack of trimester stratification, to enhance transparency.

### Conclusion

The conclusion is clear, concise, and supported by the study findings. The recommendation for routine thyroid assessment during pregnancy is clinically sound.

### References

The references cited are relevant; however, formatting requires attention.

- Ensure consistency in reference style.
- Provide complete bibliographic details for all references.

The manuscript addresses an important clinical issue and contributes useful data reinforcing physiological thyroid changes during pregnancy. With minor revisions focusing on methodological clarification, reference formatting, and ethical declarations, the manuscript will be suitable for publication.