

REVIEWER'S REPORT

Manuscript No.: IJAR-51846

Date: 27-05-2025

Title: PREDICTORS OF OUTCOME OF NONINVASIVE VENTILATION IN SEVERE COPD EXACERBATION

Recommendation:

Accept as it is.....YES.....

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality			√	
Techn. Quality			√	
Clarity		√		
Significance			√	

Reviewer's Name: Dr Aamina

Reviewer's Decision about Paper: **Recommended for Publication.**

Comments (*Use additional pages, if required*)

Reviewer's Comment / Report

1. Clinical Relevance and Contribution:

The abstract presents a clinically significant and relevant topic in respiratory medicine. It focuses on non-invasive ventilation (NIV) outcomes in acute exacerbation of COPD (AECOPD), a major area of concern due to the associated morbidity and healthcare burden. The identification of early predictors for NIV success provides meaningful insights for clinical decision-making.

2. Structure and Clarity:

The abstract is well-structured with clear divisions into Background, Methodology, Results, and Conclusion. Each section is concisely written, conveying essential information in a logical sequence. Key terms are appropriately included, and numerical data is presented clearly.

3. Methodological Rigor:

The methodology is well defined as a prospective cohort study with detailed information on setting, sample size, and data collection methods. The inclusion of clinical parameters and arterial blood gas (ABG) analysis strengthens the reliability of findings.

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4. Data Presentation:

Findings are presented clearly with appropriate use of statistical indicators (p-values) to support the significance of the results. The comparison between success and failure groups, along with identified predictors (pH, PaCO₂, and PaO₂), is effectively communicated. Reported complications add depth to the evaluation of NIV use.

5. Conclusion:

The conclusion is aligned with the presented results and emphasizes the clinical utility of early ABG improvements as predictors of NIV success. It highlights the importance of ongoing monitoring in guiding treatment pathways.

Introduction Review:

1. Context and Justification:

The introduction provides a comprehensive overview of the global and national burden of COPD, including the high incidence of exacerbations and associated mortality. It effectively establishes the need for alternative management strategies like NIV.

2. Depth and Coherence:

The section is thorough and cohesive, covering pathophysiology, challenges with invasive mechanical ventilation, and the rationale behind choosing NIV. The transition from conventional treatment limitations to the potential of NIV is logically developed.

3. Integration of Literature:

The introduction is well-supported by referenced literature, including global statistics and pathophysiological mechanisms. The references offer a credible foundation for the study and underline the importance of exploring predictors for NIV outcomes.

4. Language and Flow:

The writing is formal, academic, and precise. It maintains a good flow, transitioning seamlessly from epidemiological context to clinical focus. Technical terms are appropriately used and well integrated.

Overall Impression:

The study is highly relevant, methodologically sound, and clearly articulated. It adds valuable knowledge to the management of AECOPD using non-invasive ventilation and offers practical insights for patient stratification and treatment optimization.