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Journal Name:	Asian Journal of Research in Infectious Diseases
Manuscript Number:	Ms_AJRID_123176
Title of the Manuscript:	Short-term effect of PM2.5 on childhood pneumonia admissions in Ouagadougou Burkina Faso
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>This manuscript is crucial for the scientific community as it explores the impact of PM2.5 on childhood pneumonia in a low-resource setting, a topic with limited existing research. Its findings on age-specific effects and the role of comorbidities provide valuable insights that can inform public health strategies. The study's robust methodology and focus on a vulnerable population make it a significant contribution to the field of environmental health.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The current title, "Short-term effect of PM2.5 on childhood pneumonia admissions in Ouagadougou, Burkina Faso," is clear and accurately reflects the study's focus on the relationship between PM2.5 exposure and childhood pneumonia in a specific geographical area.</p> <p>However, to make the title more comprehensive and highlight the study's key findings, a more descriptive alternative could be:</p> <p>"Impact of PM2.5 Exposure on Childhood Pneumonia Admissions in Ouagadougou, Burkina Faso."</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract of the article is generally comprehensive, providing a clear overview of the study's aims, methodology, results, and conclusions. However, there are a few areas where it could be improved:</p> <ol style="list-style-type: none"> 1. Clarification of Key Findings: The abstract mentions that there is no direct association between PM2.5 and childhood pneumonia but suggests that PM2.5 may have a modifying effect based on age. This point could be clarified to highlight how PM2.5 impacts different age groups more explicitly. 2. Recommendation for Further Studies: While the abstract suggests further studies are needed, it would be beneficial to specify what kind of studies (e.g., longitudinal studies, intervention-based studies) or what aspects need further exploration. <p>Suggested Revision: Consider rephrasing the sentence about the lack of a direct association to make it more nuanced, for instance: "While no direct association between PM2.5 levels and overall childhood pneumonia admissions was found, the data suggest that PM2.5 may influence the risk of pneumonia in children aged 5 years and older."</p> <p>Overall, the abstract is well-structured but could benefit from these minor adjustments to enhance clarity and impact.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes, the subsections and structure of the manuscript are generally appropriate and well-organized. The manuscript follows a logical flow, with clearly defined sections including the Abstract, Introduction, Materials and Methods, Results, Discussion, and Conclusion. Each section serves its purpose in presenting the study's objectives, methodology, findings, and interpretations.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript presents a scientifically robust and technically sound study. It employs well-established statistical techniques, such as autoregressive integrated moving average (ARIMA) modeling, to analyze the impact of PM2.5 on childhood pneumonia admissions, which adds credibility to the findings. The study design, involving a substantial sample size of 2012 children and the use of detailed sociodemographic, clinical, and environmental data, ensures a comprehensive analysis. Additionally, the manuscript demonstrates thorough consideration of confounding variables, enhancing the validity of the results. Overall, the methodological rigor and the careful control of variables make the study's conclusions reliable.</p>	

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<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>-</p>	<p>The references in the manuscript are generally sufficient and include many recent sources, particularly those from 2019 to 2022, which are essential for a study focused on current environmental and health data. However, some references, such as those from 2005 and 2007, might be considered outdated given the rapidly evolving understanding of air pollution and health impacts. To strengthen the manuscript, consider including more recent studies or reviews from the last five years that address similar topics.</p>	
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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the manuscript are generally suitable for scholarly communications. The text is coherent, and the arguments are logically structured. However, there are minor issues with grammar, punctuation, and word choice that could be improved for better clarity and readability. For example, some sentences are long and complex, which may affect comprehension. Simplifying these sentences and ensuring consistent use of tense and punctuation would enhance the overall quality of the manuscript.</p> <p>Here are some suggestions to improve the language and readability of the manuscript:</p> <ol style="list-style-type: none">1. Simplify Complex Sentences:<ul style="list-style-type: none">- Original: "The study sought to determine the effect of short-term PM2.5 exposure on childhood pneumonia admissions."- Suggested: "This study aimed to evaluate the impact of short-term PM2.5 exposure on childhood pneumonia admissions."2. Clarify Word Choice:<ul style="list-style-type: none">- Original: "The mechanism by which PM affects pneumonia is complex."- Suggested: "The mechanisms through which PM influences pneumonia development are complex."3. Improve Consistency in Tense:<ul style="list-style-type: none">- Original: "The study included all children admitted between July 2019 and June 2020 with or without a diagnosis of pneumonia."- Suggested: "The study includes all children admitted between July 2019 and June 2020, regardless of whether they were diagnosed with pneumonia."4. Enhance Clarity by Breaking Up Long Sentences:<ul style="list-style-type: none">- Original: "While there is no direct association between childhood pneumonia hospitalization and the physical measurement of atmospheric PM2.5 concentration, however, PM2.5 may have a modifying effect on the association between childhood pneumonia hospitalization and age."- Suggested: "There is no direct association between childhood pneumonia hospitalizations and atmospheric PM2.5 concentrations. However, PM2.5 may modify the relationship between pneumonia hospitalizations and the age of the children."5. Correct Minor Grammatical Errors:<ul style="list-style-type: none">- Original: "The odds increased marginally after the addition of temperature [AOR: 1.39(1.01-1.92)] but not humidity [AOR: 1.39(1.01-1.92)]."- Suggested: "The odds increased marginally after adjusting for temperature [AOR: 1.39(1.01-1.92)] but not after adjusting for humidity [AOR: 1.39(1.01-1.92)]." <p>Incorporating these revisions would make the manuscript more polished and easier to read, aligning it with the standards of scholarly communication.</p>	
<p>Optional/General comments</p>	<p>Here are some optional and general comments to consider for further improving the manuscript:</p> <ol style="list-style-type: none">1. Introduction Depth: The introduction provides a good overview of the topic but could benefit from a more detailed discussion on the specific pathways through which PM2.5 influences respiratory health, particularly in children. Including recent findings from similar studies in other regions could help contextualize the significance of your research.2. Visual Aids: Consider adding more visual aids, such as graphs or charts, to represent key data points, especially in the results section. This could help readers quickly grasp the trends and relationships identified in your study.3. Discussion Section: The discussion is well-developed but could be enhanced by addressing potential limitations in more detail. For example, discuss the limitations related to the generalizability of	

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	<p>the findings beyond the study's location and the potential impact of unmeasured confounding variables.</p> <p>4. Future Research: It might be helpful to expand on the suggestions for future research. Specifically, highlight how further studies could address the limitations of your current work or explore new avenues of investigation, such as the impact of PM2.5 on other respiratory conditions or long-term health outcomes.</p> <p>5. Clarity of Technical Terms: Ensure that all technical terms are clearly defined, especially for readers who may not be familiar with the specific methodologies used (e.g., ARIMA modeling). A brief explanation or footnote could improve accessibility for a broader audience.</p> <p>These comments are intended to further refine and enhance the manuscript, making it more impactful and accessible to a wide scholarly audience.</p>	
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PART 2:

	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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