

Lindsay Summer's Review

Article: *Community acquired pneumococcal pneumonia in Northwestern Nigeria: epidemiology, antimicrobial resistance and outcome.*

The article provides a epidemiological look at pneumococcal pneumonia in the north-western region of Nigeria. The article provides a clear purpose statement within the Introduction as well as clinical definition of pneumococcal pneumonia in the Materials and Methods section. These points, as well as a thorough discussion section, are strengths of the article.

I ask the authors to consider the comments below in order to strengthen the article.

1. Abstract

- a. Overall, the abstract contains major grammatical errors and several incomplete sentences. I suggest revising the entire abstract to ensure better readability.
- b. More detail is needed in the abstract on the actual purpose and importance of this study. I would recommend adding additional information in the Background section of the abstract.

2. Introduction

- a. For consistency, either change 'Background' to 'Introduction' in the Abstract or vice versa for the Introduction section.
- b. It is repeated twice in the first two sentences that community-acquired pneumonia (CAP) is a leading cause of morbidity and mortality. Immediately after, it is stated that Asia and Africa are countries. These are simple fixes that should not be overlooked.
- c. Since the study intends to focus on north-western Nigeria, it is important to clarify what regions the 50%, 54.5% and 60% of CAP account for. The article only states that the percentages are from different parts of Nigeria.

3. Materials and Methods

- a. I suggest including how demographic information was collected and how the referral center was chosen for the study.
- b. I would like to see "standard aseptic procedures" and "standard procedures" for plate examinations explained further. The methods section is intended for this purpose.

4. Results

- a. The main issue with the results section is the mention of Tables 1, 2 and 3. However, there is no inclusion of these tables whatsoever in the article. This above all needs to be revised and included.
- b. The results introduces terms like "bacteremic pneumonia" and "CURB-65" for the first time in the paper. These need to be introduced much earlier in the article

and explained further. I would suggest including an explanation of the difference between bacteremic pneumonia and pneumococcal pneumonia in the Introduction. Usage of CURB-65 scores in the study should be mentioned in the Materials and Methods section.

5. Discussion

- a. The first paragraph mentions that the sample size is very large and a strength of the study. However, in the fifth paragraph, it mentions the sample size being limited and a restriction of the study. This is very contradictory and in need of revision to clarify.
- b. The discussion overall is very thorough, but I think most of the information should be used in the Introduction instead. There is mention of previous studies and seasonal differences that are important background information. The discussion should focus on the importance of this specific study results and what further steps can be made.

Overall recommendation: Major revision