

# Review of: "Medical Research in British India: Content Analysis of "The Indian Medical Gazette""

Sinta Ningrum<sup>1</sup>

<sup>1</sup> Universitas Padjadjaran

**Potential competing interests:** No potential competing interests to declare.

## Strong Points:

1. **Historical Context:** The paper provides a comprehensive historical context, detailing the development of medical research and education in British India. This sets a strong foundation for understanding the evolution of medical practices and policies.
2. **Content Analysis:** The use of content analysis and word clouds to analyze the publication patterns and frequent keywords in "The Indian Medical Gazette" is well executed, providing clear insights into the focus areas of medical research during the colonial period.
3. **Data Presentation:** The paper presents data in a structured manner with tables and figures that help visualize publication trends, document types, and authorship patterns effectively.

## Areas for Improvement:

1. **Clearer Arguments:** The introduction and historical context sections are detailed, but the transition to the main research objectives could be smoother. A more explicit statement linking the historical context to the objectives of the study would strengthen the argument.
2. **Methodology Details:** The methodology section could benefit from additional details on the data cleaning process and the specific criteria used for content analysis. This would enhance the replicability of the study.  
**Data Cleaning Process:**  
Outline the specific steps taken for data cleaning, including:
  - Removal of duplicate records
  - Handling of missing data (e.g., using mean/mode imputation or removing incomplete records)
  - Standardization of text data (e.g., converting all text to lowercase)
  - Removal of stop words, punctuation, and irrelevant terms
  - Verification of data accuracy through cross-referencing with other sources, if available.

**Content Analysis Criteria:** Explain the basis for developing the content analysis criteria, such as:

- Inclusion and exclusion criteria for selecting articles (e.g., publication date range, relevance to medical research)
- Coding rules for categorizing content (e.g., using thematic analysis to identify recurring themes and keywords)
- Use of software tools for content analysis (e.g., NVivo, ATLAS.ti) to ensure consistency and replicability.

### 3. Additional Data:

- The study focuses solely on "The Indian Medical Gazette." Including data from other contemporary medical journals could provide a more comprehensive picture of medical research in British India. This would also help validate the findings from the Gazette.

### 4. Discussion Depth:

- The discussion section could delve deeper into the implications of the findings. For example, how did the identified trends in publication and research priorities influence medical practices and policies in British India? Linking the findings to broader socio-political contexts would provide a richer analysis.

### 5. Novelty and Contributions:

- Highlighting the novel contributions of the study more explicitly in the conclusion would strengthen the paper. This could include a discussion on how the findings provide new insights into colonial medical research and its legacy in modern Indian medical practices.

### 6. Additional Experiments/Data:

- The study could include a comparative analysis with modern medical journals to show how medical research priorities have evolved. This would provide a dynamic perspective on the progress in medical research and practices.

### Recommendations:

- **Clearer Arguments:** Make the transition from historical context to research objectives more explicit. For example:  
Current Text: "The period of British rule from 1757 to 1900 had observed many major socio-political and economic transformations."  
Improved Transition: "The British colonial period from 1757 to 1900 was marked by significant socio-political and economic transformations that profoundly impacted public health and medical research. This study seeks to investigate how these transformations influenced the priorities and practices in medical research, as reflected in the articles published in 'The Indian Medical Gazette'. By linking these historical contexts to our research objectives, we aim to provide a comprehensive analysis of the medical research trends during British rule in India."
- **Detailed Methodology:** Provide more details on data cleaning and content analysis criteria.
- **Broader Data Sources:** Include data from other medical journals of the period for a comprehensive analysis, such as British Medical Journal, The Lancet, Journal of the American Medical Association, New England Journal of Medicine, and International Journal Of Medical Informatics.
- **In-depth Discussion:** Explore the broader implications of the findings concerning socio-political contexts.
- **Highlight Novelty:** Emphasize the novel contributions of the study in the conclusion.
- **Comparative Analysis:** Conduct a comparative analysis with modern medical journals to show the evolution of research



priorities.