

# Review of: "Knowledge among Health care workers (HCWs) regarding biomedical waste management (BMW) during COVID-19 Pandemic"

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

The title of the study "Knowledge among Health care workers (HCWs) regarding biomedical waste management (BMW) during COVID-19 Pandemic" is specific and informative. It provides essential information about the study's main topic, which is the knowledge of healthcare workers about biomedical waste management during the COVID-19 pandemic.

However, there are a few potential areas of improvement:

**Clarity:** The title could be clearer by specifying the type of healthcare workers that were included in the study. For example, if the study only focused on nurses or doctors, it would be helpful to include that information in the title.

**Conciseness:** The title is quite long, which may make it difficult to read and remember. Consider shortening the title while still maintaining its accuracy and informative nature.

**Use of abbreviations:** The title includes abbreviations such as HCWs and BMW, which may not be immediately clear to readers who are not familiar with the topic. It would be helpful to spell out the abbreviations at least once in the title or abstract. A revised title that addresses these points could be: "Knowledge of Biomedical Waste Management Among Nurses during COVID-19 Pandemic: A Study"

The introduction of the study provides a broad overview of the impact of COVID-19 on waste management and highlights the importance of proper management of biomedical waste during the pandemic. The introduction also defines biomedical waste and emphasizes the legal and social responsibility to manage it effectively. However, there are some areas for improvement:

**Clarity:** The introduction could benefit from a clearer statement of the research problem and research question. The main focus of the study is not explicitly stated, making it difficult for readers to understand the study's purpose.

**Relevance:** While the introduction provides some background information on COVID-19 and biomedical waste management, it could benefit from a more explicit explanation of why this particular topic was chosen for the study and why it is relevant.

**Organization:** The introduction could benefit from a clearer structure to guide readers through the key points of the study.

Overall, the methodology of this study appears to have some strengths and weaknesses.

#### Strengths:

1. The study design, which was a cross-sectional survey, is appropriate for assessing knowledge and attitudes among a specific population within a specific timeframe.
2. The study included a diverse range of health care workers, including resident doctors, nursing staff, technicians, and sanitation staff. This allows for a more comprehensive understanding of the knowledge and attitudes of the healthcare workforce.
3. The study tool used, a semi-structured questionnaire, appears to have been developed with consideration given to the research questions and aims of the study.
4. The scoring system used to assess knowledge was clear and easy to understand.

#### Weaknesses:

1. The study tool used, a semi-structured questionnaire, was developed by the researcher and may not have been validated or tested for reliability.
2. There is no information provided on how participants were recruited, which raises questions about the representativeness of the sample.
3. The study did not include any qualitative data, such as interviews or focus groups, which may have provided a more in-depth understanding of the knowledge and attitudes of healthcare workers towards biomedical waste management during the COVID-19 pandemic.

The study suggests that there is a variation in knowledge and attitude regarding biomedical waste management among different categories of healthcare workers, with doctors and nurses having better knowledge and attitude compared to paramedics and sanitary staff. The use of a semi-structured questionnaire adapted from different research papers is a limitation of the study as it may have affected the standardization of data collection. Additionally, the study does not provide information on the actual practices of healthcare workers in managing biomedical waste. Nonetheless, the findings of the study can be useful for developing targeted training programs to improve the knowledge and attitude of healthcare workers towards biomedical waste management.