

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 study aimed to assess the knowledge of HCWs regarding BMW during the COVID-19 pandemic.
- A cross-sectional survey was conducted in 2020 among HCWs from various healthcare facilities in India.
- A total of 576 participants were included in the study, and a structured questionnaire was used to collect data.
- The majority of HCWs had knowledge of BMW and its segregation, transportation, and storage practices.
- However, knowledge gaps were identified in relation to the use of personal protective equipment (PPE) during BMW management.
- HCWs lacked knowledge regarding the disposal of BMW in the context of COVID-19, with many unaware of the need for specific disposal practices.
- Training was found to be a significant predictor of adequate knowledge of BMW management practices.
- Medical staff had better knowledge of BMW management than non-medical staff.
- Age, gender, education, and experience were not significant predictors of adequate knowledge of BMW management practices.
- The study highlights the need for regular training and education for HCWs on BMW management, particularly in the context of COVID-19, to ensure the safety of HCWs and the environment.
- The management of biomedical waste (BMW) is an important aspect of healthcare services, particularly during the COVID-19 pandemic, as the proper handling and disposal of BMW can help reduce the risk of infection and transmission. In this cross-sectional survey study, the authors aimed to assess the knowledge of healthcare workers (HCWs) regarding BMW management during the COVID-19 pandemic.
- The study was conducted among HCWs from various healthcare facilities in India. A total of 576 participants were included in the study, and a structured questionnaire was used to collect data. The questionnaire consisted of questions related to the knowledge of HCWs regarding BMW management, including its segregation, transportation, storage, and disposal practices, as well as the use of personal protective equipment (PPE) during BMW management.
- The results of the study indicated that the majority of HCWs had knowledge of BMW and its segregation, transportation, and storage practices. However, knowledge gaps were identified in relation to the use of PPE during BMW management. HCWs lacked knowledge regarding the disposal of BMW in the context of COVID-19, with many unaware of the need for specific disposal practices.
- Furthermore, the study found that training was a significant predictor of adequate knowledge of BMW management

practices. HCWs who received regular training had better knowledge of BMW management practices than those who did not receive training. Medical staff had better knowledge of BMW management than non-medical staff. However, age, gender, education, and experience were not significant predictors of adequate knowledge of BMW management practices.

- The authors conclude that the study highlights the need for regular training and education for HCWs on BMW management, particularly in the context of COVID-19, to ensure the safety of HCWs and the environment. The findings suggest that there is a need for more comprehensive training programs that cover all aspects of BMW management, including the use of PPE and specific disposal practices. The study also suggests that medical staff may require additional training to ensure that they are adequately prepared to handle BMW during the COVID-19 pandemic.
- Overall, the study provides important insights into the knowledge gaps of HCWs regarding BMW management during the COVID-19 pandemic. The findings suggest that there is a need for more comprehensive training programs for HCWs to ensure that they are equipped with the knowledge and skills necessary to manage BMW safely and effectively. The study also underscores the importance of BMW management during the COVID-19 pandemic, as proper management can help reduce the risk of infection and transmission and protect the environment.

Reference:

P.C. Ojha, S.S. Satpathy, A.K. Ojha, L.B. Sukla, D. Pradhan, 2022. Overcoming challenges due to enhanced biomedical waste generation during COVID-19 pandemic. Science of the Total Environment, 832, 155072. <https://doi.org/10.1016/j.scitotenv.2022.155072>