# A Descriptive Cross-Sectional Study to Assess the Practice Regarding Biomedical Waste Management among Healthcare Workers at Selected Hospitals of District, Mohali Punjab

**Deepika R. Kumar, Ambika F. Christopher, Kamaldeep Kaur, Aadil Hassan Rather, Aashaq Hassan Khan, Afrooza Akhter, Ahraz Shafi, Anita Sharma, Faisal Ahmad Lone, Gurpreet Kaur, Insha Ali, Insha Nabi, Sarfaraz Ahmad Dar**

Department of Nursing, Rayat Bahra College of Nursing, Mohali, Punjab, India

## Abstract

**Background:** Biomedical waste management is essential for preventing healthcare-associated infections and environment contamination. Proper waste segregation, handling, and disposal by healthcare workers are critical for ensuring patient safety ar regulatory compliance.

**Objectives:** The objective of this study was to assess the practices regarding biomedical waste management among healthcare workers selected hospitals of District Mohali, Punjab.

**Methodology:** A quantitative descriptive study was conducted at Behgal Cancer Hospital and Indus Superspeciality Hospital, Mohali, Punja from March 2026 to May 2026. A total of 150 healthcare workers were selected using a convenient sampling technique. Data were collecte using a self-structured observational practice checklist and analyzed using descriptive statistics (frequency, percentage, mean, median, an standard deviation) and inferential statistics (Chi-square test).

**Results:** Among 150 healthcare workers, 128 (85.3%) demonstrated good practice, 22 (14.7%) demonstrated average practice, and none demonstrated poor practice. The mean practice score was 39.51, the median was 41, and the standard deviation was 5.14. Practice scores showed significant associations with educational qualification, designation, professional experience, and working shift, whereas no significant association was observed with age and gender.

**Conclusion:** Most healthcare workers demonstrated good biomedical waste management practices. Continuous in-service education, periodic monitoring, reinforcement of Biomedical Waste Management Rules, and regular supervision are recommended to sustain compliance, improve identified practice gaps, and enhance patient safety and environmental protection.

**Keywords:** Biomedical waste management, healthcare workers, hospital waste, infection control, practice