HOSPITAL WASTE MANAGEMENT: A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICES AMONG HEALTH WORKERS AND WASTE HANDLERS IN JIGME DORJI WANGCHUK NATIONAL REFERRAL HOSPITAL, THIMPHU, BHUTAN

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In this study, we assessed the knowledge, attitude, and practices of health workers and waste handlers regarding hospital waste management. The study was conducted in the Jigme Dorji Wangchuk National Referral Hospital, Thimphu, Bhutan. A total of 279 health workers and waste handlers were surveyed.

The results showed that knowledge of hospital waste management was adequate among health workers and waste handlers. However, there was a need for improvement in the attitude and practices regarding waste management. The findings suggest that there is a need for continuous training and awareness programs to improve waste management practices in the hospital setting.

Key findings:
- Adequate knowledge of hospital waste management
- Need for improvement in attitude and practices
- Continuous training and awareness programs required

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This cross-sectional study, including both quantitative and qualitative, explored the level of knowledge, attitude and practices on hospital waste management among the health staff and waste handlers and the current waste management practices in the National Referral Hospital of Bhutan. Self administered questionnaires, face to face interview, a walk-through survey and an in-depth interview were the measurement tools used. A sample size of 279 was recruited for the study. Overall, 54.2% of doctors were found to have high level of knowledge compared to majority of nurses (75.3%) and paramedics (69.0%) who possessed moderate level of knowledge. With majority of health staff possessing neutral attitude, 75.0% doctors, 58.8% nurses and 58.0% paramedics performed good practices on hospital waste management. Among the waste handlers, nearly 50% had high knowledge but only 32.4% showed positive attitude. However, 65.4% of waste handlers performed good practices on hospital waste management. The Chi square test revealed that age and number of years in the present occupation among the health staff, and the age for waste handlers were significantly associated (p-value < .05) with the level of practices. In the study, 43.0% of health staff and 21.6% of waste handlers experienced one or the other kind of injury or illness due to hospital waste within the last 12 months. Among those, 67.4% health staff and 75.0% waste handlers encountered needle pricks. Hepatitis B immunization coverage was 92.8% and 94.6% in health staff and waste handlers respectively. Walk-through survey discovered that waste management in JDWNRH is inadequate and the in-depth interview revealed several challenges to overcome. Some of the recommendations from the study, including both short term and long term, are to emphasize on proper segregation of waste, labeling the waste bags, strict supervision and monitoring, regular training program, review of present waste management guideline, and to consider hospital incinerator and wastewater treatment plant.