

## **Abstract**

### **Introduction**

Biomedical waste is a by-product of health care service delivery that includes sharps, blood, body parts, chemicals, pharmaceuticals, medical devices and radio-active materials (WHO, 2008). Proper management of biomedical waste is essential in protecting health care workers, waste handlers and the community from infections, toxic effects and injuries. Mulago National Referral Hospital being the leading producers of bio-medical waste little is known about the factors influencing bio-medical waste management.

### **Objective of the study**

The main objective of the study was to identify the factors affecting management of biomedical waste among health workers in Mulago National Referral Hospital, Kampala district.

### **Method**

A cross sectional study design that utilized quantitative methods of data collection using a self-administered questionnaire was carried out at Mulago National Referral Hospital. A total of 384 health care workers selected from 6 departments (Paediatrics, ENT, Dental, Orthopaedics, Laboratories and The heart institute) were interviewed. The main outcome of the study was management of bio-medical waste. The study used logistic to estimate the Odds ratios and their 95% confidence interval for safe management of bio-medical waste.

### **Results**

More than half (55%) of the respondents reported that the hospital's current status of managing bio-medical waste is safe. Majority (45%) of the health care workers had inadequate knowledge on the management of bio-medical waste. More than three quarters of the health care workers had good attitude towards management of bio-medical waste which represents a very high opportunity to improve management of bio-medical waste in Mulago National Referral Hospital.

Factors were found to be significantly associated with safe management of bio-medical waste: cadre, nursing assistants are 0.3 less likely to engage in safe management of bio-medical waste than other cadres; OR =0.3, 95% CI=0.1-0.6 Period of practice (6-10 years); OR =0.4, 95% CI=0.2-0.8 Level of knowledge (Inadequately knowledgeable and Not knowledgeable); OR =0.5, 95% CI =1.1- 3.5 and OR = 0.3, 95% CI= 0.98-0.99 respectively, equipment; OR = 0.3, 95% CI=0.2-0.5 and training; OR =0.5, 95% CI=0.3-0.8).

### **Conclusion**

The current status of managing bio-medical waste in Mulago national referral is still unsafe as only 55% of health workers reported safe management. This is attributed to the low level of knowledge and lack of equipment in deferent service areas.

### **Recommendation**

There is need to equip health workers with adequate and up to date information on management of bio-medical waste at all levels of training or cadre by the responsible authorities.

There is need to increase on the provision of equipment in all service areas for storage and transportation of bio-medical waste.