EXECUTIVE SUMMARY

This was an interventional research project carried out to improve clinical waste management (CWM) processes and practices in all the Base Hospitals in the Regional Director of Health Services Gampaha. Interventions were implemented to develop the clinical waste management processes and practices in the health care institutions according to the Health Care Waste Management Guidelines published by WHO, 2014.

Aim of this study was to identify the present gaps in the CWM processes and practices in all the Base Hospitals in the RDHS Gampaha compared to the standard practices recommended by WHO, 2014, designing a package of appropriate interventions to overcome the gaps and to evaluate the progress of the project three months after implementation.

Both qualitative and quantitative approaches, focus group discussions, checklists and employee's survey was used to assess the processes and practices of CWM. Qualitative techniques were used mainly for gap identification and designing the interventions. Quantitative methods were used to assess the effectiveness of the improvements. Total quality improvement method was designed with extensive literature review, consulting the experts in the field and relevant stakeholders. Qualitative findings confirmed that there were many gaps in the segregation, collection, and storing, external transportation and treatment processes of CWM. Lack of the knowledge among Nursing Officers (NOs) and Junior Health Staff (JHS), poor segregation, inadequate Personal Protective Equipment (PPE) usage, substandard clinical waste (CWs) stores, incineration of general waste and poor supervision by operational managers were identified as the main gaps in the system.

Interventions consisted of developing CWM guidelines introducing an internal circular in the RDHS Division, improving knowledge on CWM among NOs and JHS, making PPEs available, developing the conditions of CWs stores, and increasing the frequency of collecting CWs and optimising the treatment process in BH Wathupitiwala. In addition to that, a CWM tool was introduced to increase the overall supervision of the CWM performances.

The knowledge among the Nursing Officers (NO) and Junior Health Staff (JHS) on CWM had improved significantly according to the Wilcoxon signed ranks test, where the mean of the scores received for SAQ was 3.4 before and increased to 9.6 after the intervention. It was found that previously Base Hospital Wathupitiwala incurred Rs: 8618.15 /day to treat HCWs which came down to Rs 4514.70/per day after the intervention. Before the intervention HCWs, 581.41kg/day was treated, even though it was reduced to 158.38kg/day following the intervention. Hospital managers, NOs and JHS revealed that the system had achieved significant improvements and now the system is safer for the employees, environmentally friendly and economical than the previous practices.

Package of interventions designed with the stakeholders helped to increase adherence of CWM practices and processes up to the standard recommended by WHO and enhanced the patient and employee safety. CWM tool made a positive difference in the daily supervision of CWM practices, standard CWs stores and regulated incinerating practices made the treatment process more economical and environmentally friendly. Conducting training programmes on HCWM for NOs and JHSs, availability of continuous logistics like PPEs, waste bins, waste carts and establishing standard CWs stores to prevent possible environmental pollutions through continuous supervision and monitoring was recommended.