SHORT COMMUNICATION

COVID 19 WASTE MANAGEMENT IN A TERTIARY CARE HOSPITAL

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ABSTRACT

INTRODUCTION

The world has witnessed the positive environment implications of nationwide lockdowns brought down upon by covid 19 such as cleaner rivers and clearer skies, the same is not the case with respect to solid waste management.

OBJECTIVE

To study the covid 19 waste management practices and precautions taken in a tertiary care hospital.

METHODOLOGY

A retrospective study from 1st January 2020 to 30th November 2021 was conducted at NIMS, Hyderabad. Direct observational study done to assess the existing facility, manpower, workflow and practices followed.

RESULTS

An average of 252 kgs biomedical waste is generated daily. All the biomedical waste including the waste generated in covid 19 areas, Rapid antigen testing centre, RTPCR lab are segregated in separate colour coded bags and are transferred to collection room, where it is stored in different rooms based on the colour, ready to be collected by GJ multiclave for treatment and disposal. Adequate number colour coded waste bins and needle destroyers were provided to covid areas. Also, hypochlorite solution was issued in adequate quantity. No calibrated weighing machine was available onsite nor any biomedical waste registers were maintained. Yellow bins were filled beyond 3/4th level due to PPE kits leading to spillage but frequent collection of waste was followed. Whereas, other bins were not filled beyond 3/4th level to avoid spillage. There was 100% compliance in segregating infectious sharps from non-sharps. There was 100% compliance in segregating waste in Covid ICUs and 90% compliance in the covid wards. On-site measures like treating PPE with hypochlorite was practiced. Storage in the facility was never beyond 48 hours. A total of 19 workers are posted in three shifts for collecting waste. Adequate PPE kits were provided to all the workers in covid units apart from the regular safety equipments. 20:10 day rule was followed where the workers worked for 20days followed by 10days of quarantine. Training of staff was on periodic basis. Separate lifting trolleys for covid areas earmarked and disinfection with hypochlorite was practiced. Workers posted underwent routine RAT once a month and a quarantine of 15 days was given to the tested positive workers.

CONCLUSION

There was 100% compliance in biomedical waste segregation in Covid ICUs and 90 % compliance in the covid wards. Stored waste was never kept beyond 48 hours.

KEYWORDS

Covid 19 waste, biomedical waste, segregation, treatment and disposal.