Chapter 6
Bio-Medical Wastes Handling Strategies During the COVID-19 Pandemic

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ABSTRACT

The handling of genetic residues, biohazardous waste, and other non-shrinkable materials such as e-waste is essential for the preservation of Mother Nature and human wellbeing. This chapter will bring forth different methods of managing biomedical wastes, inspecting the roots of the spread of the hazardous virus, and protecting the front-line warriors. To properly react to this disaster, each administration must create a backup strategy based on regional circumstances and the seriousness of the coronavirus's spread. Technology is being used to reduce the need for in-person

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medical appointments and save on the cost of treatment, which is a boon for human civilization in the context of the pandemic. The Central Pollution Control Board's existing rules provide a framework for managing healthcare waste with respect for the safety of the public. Bio-waste management strategies using IoT and IoMT techniques are illustrated in this chapter.

INTRODUCTION

The bewilderment of the coronavirus in late 2019 created threats to individual health, affected our societies and economy with no uniform intensity, and transposed the general strata of perception of safety, health, and livelihood by the masses. In 2020, WHO declared COVID-19 an outbreak. What the planet did not foresee was the number of lives that would be lost. In respect to the above statement, the healthcare sector has then gained prominence over other services by saving lives, spreading awareness,, training their staff, and expecting a steadfast result from the battle of saving thousands of people against COVID 19. The Indian subcontinent has an unprecedented menace at hand: the rising pile of bio-medical waste. However, the jeopardy it has pushed upon the earth due to the mammoth sized amounts of increase in the biomedical waste that is being produced by hospitals that are treating COVID-infected patients is a fact that cannot be overlooked. However, it is not a revelation to assert that effectively managing medically contaminated trash contains the answer to controlling the coronavirus cycle. Hospitals guard human life, but, hazardous, COVID-led clinical waste created, particularly in the current pandemic crisis, continues to do irreparable harm. Mismanagement of health care waste increases the number of airborne pathogenic infectious organisms, implying a growing hazard to the immediate environment of numerous pharmaceutical centres, research facilities, and public areas. While some of the top brains are contemplating finding a cure for the ongoing Corona virus, medical garbage contaminated with hazardous communicable pathogens has now turned into a distress for healthcare facilities as they can ramp up the curve of the affected cases. This book chapter focuses on the covivirus-infected trash handling system in the midst of the coronavirus pandemic. We systematically unravel the strata of knowledge between the surface of the panic caused by the recent coronavirus and the profundity of the dire need for the urgent management of biomedical waste, and everything in between. This book chapter has its objective to throw light on many topics that are of profound importance in the nightmare that this situation is turning into at the moment,, like the amendments made for treating the genomic misuse pre- and post-coronavirus upsurge, how the Internet of Medical Things is perceived as a boon to managing the healthcare sector, and the aggravating amounts of its subsequent trash(Glasser et