

# **The Enviro-Economic Aspects of Bio Medical Waste Management in Coimbatore: A Micro Study**

*Minor Research Project*

*Submitted to*



## **University Grants Commission (UGC)**

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## **Executive Summary**

A growing health consciousness and concern about the quality environment apart, degradation of natural resources and pollution of air, water and land continues with economic activities in the name of social welfare. Earlier, economic growth was considered synonymous with industrialization which led to industrial pollution. Currently, the growth of services sector has been taken as an indicator of development. Among the various components of services sector, health sector assumes greater significance. In the context of increasing demand for human capital, the quality of the population has been judged by the performance of health care sector. When such a sector performs negatively (in the form of pollution created by healthcare waste) instead of positive promotion of well being of the people, it requires greater attention.

The growth of modern and improved health facilities in the healthcare sector, especially in cities and towns, bring a large number of patients to these hospitals and nursing homes, which again increase the quantum of bio-medical waste generated. At the same time, the bio-medical waste management system has not developed in commensurate with the increase in the volume of both hazardous and general bio-medical wastes. The non-compliance of both public and private hospitals in spite of rules and regulations revealed the absence of an institutional mechanism to oversee the working of bio-

medical waste management system in the hospitals. And for the non compliance of not only by small hospitals but also by public sector healthcare institutions, the reasons attributed were the cost involved in implementation of scientific processes of bio-medical waste disposal. Hence, to work out the quantum of bio-medical waste generated, the cost of its disposal and the working of private incinerator plant, an empirical study was done.

The Bio-medical Waste Management Rules 2016, implies that scientific disposal of Biomedical Waste through segregation, collection, treatment, transport and disposal in an environmentally sound manner minimizes the adverse impact on health workers and on the environment. The hospitals are required to put in place the mechanisms for effective disposal either directly or through common biomedical waste treatment and disposal facilities. The new bio-medical waste management rules will change the way country used to manage this waste earlier. Under the new regime, the coverage has increased and also provides for pre-treatment of lab waste, blood samples, etc. It mandates bar code system for proper control.

In Coimbatore District the private firm Tekno Therm authorized by the Tamil Nadu Pollution Control Board to operate the Common Facilitator, located at the outskirts of the Coimbatore City collects and disposes the bio-medical waste from 585 health care establishment,

which includes private hospitals, government hospitals and 32 Urban Health Posts of the City Municipal Corporation. On an average the Tekno Therm Industries treats 3000 kgs/day of bio-medical waste per day. The charges varied from Rs 6.75 to Rs 53. Kovai Bio-waste Management Private Limited, the another common facilitator in Coimbatore district were disposing 487 kgs/day. Due to non-compliance registered by the Tamil Nadu Pollution Control Board, Coimbatore, Kovai Bio-waste Management Private Limited is not functioning.

By drawing on the positive experiences of Bio-medical Waste Management in other countries, and from progressive initiatives of BMW Management in other states and hospitals in India, it can be suitably surmised that this particular exercise in the city of Coimbatore has thrown ample light on the good practices followed in the hospitals. Undoubtedly, this study has also aided in bringing to the fore, issues in BMW Management that need to be sorted out, for a safe and healthy hospital environment. On the basis of understanding both the sides of BMW Management in Coimbatore hospitals, it can be concluded that a well-defined BMW Management system is in place. However, this system can be further strengthened with the help of devices like GPS (Vehicle tracking) and bar-coding of wastes in hospitals.