

Bio-Medical Waste Management a case Study of Iran

*Mrs. Parvin Lakbala**

*Dr. T. M. Mahesh***

ABSTRACT

All activities of living things on the earth produce different types of wastes in some form or the other. Normally, aerobic and anaerobic process in the environment degrades such products. These wastes, both biodegradable and non-biodegradable hardly had any impact on the environment until the invention of plastics by the modern man. The process of natural degradation could not keep pace with the increase in waste generated by the over increasing of population and its necessities. The air, the water and the land are today becoming disposal sinks for the waste. Many countries in the world, specially the developing countries, are facing the grim situation arising out of the environmental pollution due to pathological waste arising from increasing population and consequently the rapid growth in the number of health care centers. The seriousness of improper Bio-Medical Waste management was brought to the limelight during the "beach wash-ups" during summer 1998; which was investigated by the Environment protection Agency (EPA) of USA, and it culminated in the passing of Medical Waste Tracking Act (MWTa) Nov. 1998. This made USA the pioneer as far as waste management is concerned.

Biomedical waste poses hazard for two main reasons, the first is infectivity and other toxicity. It poses serious threat to environment and health hazards and it requires specific treatment and management prior to its final disposal. This paper try to document the practice of Bio-Medical waste (e.g. collection, storage, transportation and methods of disposal Bio-medical wastes) along with types and amount of wastes generation by hospital and level of awareness and knowledge of workers/staff about BMW. In addition, the efforts are made to analyze the causes and consequences of improper disposal of Bio-medical waste management.

Three instruments are employed such as questionnaire, in-depth interview and participant observation for collecting the information relevant to the study. The results of the study revealed that in the target hospitals, there were lack of proper waste treatment plants, insufficient trained of personnel, and protective equipments, lack of knowledge regarding the proper use of such equipments, and insufficient space for temporary storage of Bio- Medical Waste.

The sample survey was conducted in 5 teaching hospitals which are the medical referral centers in southern part of Iran and there are 4 private hospital in Shiraz city of Iran, in order to determine the amount of non-infectious and

infectious and sharps Bio-Medical Waste generated from different wards/sections in the study area. The relevant data about Bio-medical waste generation, disposal methods, from both primary and secondary sources of information was collected and the existing waste management policy with respect to collection, storage, transportation and final disposal Bio-Medical Waste.

** Ph. D. Research Scholar, parvin_lakbala@yahoo.com & **Professor of Urban and Regional Planning & Director, Institute of Development Studies, University of Mysore, Manasagangotri, Mysore 570 006, Karnataka State, India.*