In become a public health hazard. while



In addition to the waste that is produced in all residential buildings, hospitals generate pathological waste blood soaked dressings, carcasses and similar waste. These waste materials must be suitably disposed of immediately lest they putrefy, emit foul smells, act as a source of infection and disease, and become a public health hazard.

While in developing countries most of the public health problems are due to industrialisation, in developing countries many of the public health problems are also related to defective sewage and waste disposal. Many of our hospitals neither have a satisfactory waste disposal system nor a waste management and disposal policy. The disposal of waste is exclusively entrusted to the junior most staff from the housekeeping department without any supervision, and even pathological wastes are observed to be disposed off in the available open ground around hospitals with scant regard to aesthetic and hygiene considerations. Hospitals are prone to create health hazards for the public at large and also for healthcare workers with unscientific disposal of biomedical waste. Management of biomedical waste also assumes great significance where countless poverty stricken rag pickers expose themselves to disease and death while eking out a living out of sifting and sorting of such waste. Among all the hospital waste, the 'sharps' i.

e. needles, scalpels, blades, etc. are the most dangerous culprits, mainly because of their propensity to cause accidental pricks and cuts thereby providing direct entry of pathogenic organisms into the blood stream. "

Waste" can be defined as any discarded, unwanted residual matter arising from the hospital or activities related to the hospital. "Disposal" covers the

total process of collecting, handling, packing, storage, transportation and final treatment of wastes. Rapid mushrooming of hospitals and nursing homes has resulted in unprecedented amount of biomedical waste being generated.

In a study of pattern of wastes in Indian cities, the quantity of refuse varied from 0. 48 to 0. 06 kg per capita per day with total compostable matter varying from 30 to 40 per cent. The quantum of domestic waste in advanced countries is six to ten times more. So far as hospitals in advanced countries are concerned, the average refuge in hospitals in Denmark and West Germany is 3 kg per bed per day and in USA up to 14 kg per bed per day.

The quantum and type of waste reflects the life-style of the society, and this must be borne in mind in the planning of waste disposal in hospital. On an average, the volume of total solid waste in hospitals in India is estimated to range between 1 kg and 3 kg per day on a per bed basis. In a teaching hospital of 700 beds, solid waste averaged 1. 5 kg per bed per day. It is estimated that about 0.

5 kg out of this consists of food waste. In a study carried out in the family wing of a large hospital, the composition of waste was bandages, gauge and cotton wool waste 34. 1 per cent, coal ash 31.

6 per cent, foliage 13. 5 per cent, food waste 11. 5 per cent and glass, bottles, etc. 1. 8 per cent. A1988 study at AIIMS revealed that 67. 5 per cent waste originated from wards, 13. 4 per cent from OPD and 19.

1 per cent from the service area. Waste management is generally not given the importance if deserves for various reasons. The net result is that a hospital tries to cut down on the expenditure involved in waste disposal by meagre allotment of resources for this function. A clean hospital and good housekeeping have a direct effect on the health, comfort and morale of patients, visitors and hospital personnel alike. Cleanliness radiates cheer and a well-kept hospital would give the public a feeling of confidence. But in most hospitals waste handing is left to poorly educated sweeper category of workers, operating without adequate guidance, training or supervision.