INTRODUCTION
Waste from any clinic or hospital has to be managed such that no harm is done to society and environment. Waste is any material, solid, liquid, or gas that is unwanted or unvalued and discarded or discharged by its owner.[1]

The concern of biomedical waste management has been felt globally with the rise in deadly infections as AIDS, Hepatitis B due to improper disposal of healthcare waste.[2] With advances in technology many improved materials have emerged in the recent past.[3] Keeping in view incorrect management of biomedical wastes, the Ministry of environment and forests notified the “Bio Medical Waste (management and handling rules 1998).[4] Biomedical rule 1998 makes it mandatory for the healthcare establishments to segregate, disinfect and dispose of their waste in an ecofriendly manner.[5]

However the essences of cleanliness was captured by the Dravidians, who in 5000 BC gave due emphasis to safe and effective sewerage systems, to get rid of all solid and liquid waste generated by the population.[6] The awareness of these laws among the general public as well as development of policies and enforcement that respect those laws are essential.[7]

OBJECTIVES[8]
To prevent transmission of disease from patient to patient, from patient to health workers and to prevent injury to the healthcare workers in support service while handling biomedical waste. To prevent general public exposure to the harmful effects of the cytotoxic, genotoxic and chemical biomedical waste.

American Dental Association and Center for Disease control recommend that medical waste disposal must be carried out in accordance with regulations.[9] The World Bank’s Healthcare waste management guideline note lists four steps to healthcare waste management: segregation of waste products into various components that include reusable and disposable materials in appropriate containers for safe usage, transportation of waste treatment and disposal sites, treatment and final disposal.[10]

CATEGORY OF WASTE[11]
1 – human anatomical waste, 2- animal waste, 3- microbiology and biotechnology waste, 4- waste sharps, 5- discarded medicines and cytotoxic drugs, 6- soiled waste, 7- solid waste, 8- liquid waste, 9- incervation ash, 10- chemical waste.

Synergy plant locations are put up in Lucknow, Delhi, Meerut, Hissar and Gaya. Waste should be properly segregated and collected in 4 color bags- red, blue, yellow, black.[12]

For proper disposal a specific colour and type of container is required as below

DENTAL
Dental set up is a multi disciplinary system which consumes lot of items for delivery of dental care.[13] With the increase in demand for dental care, there has been a rapid growth of dental clinics in the recent years and this led to the increase in the amount of biomedical waste generated by them.[14] Dental clinics generate a number of biomedical wastes including blood soaked materials, human tissue, and the materials like scrap amalgam, photo chemical waste( developer and fixer), lead foil from traditional x-ray packets, and disinfectants used in dentistry are challenging to the environment and wisely handling and disposal them is critical.[15]

In dental, unused mercury is stored in tightly sealed, break resistant container then a waste carrier( approved by Indian pollution board) collects it. Mercury spill kit is
used for spill of mercury and for scrap amalgam, a sponge type mercontainer tm is used.[4] Amalgam substitutes need to be used and for amalgam separation sedimentation, centrifuge units, electrolysis and chemical addition is done. Gypsum products should be disposed properly. Inhaled fine particles can cause respiratory problems.[10] Lead containing wastes as lead foils in x-ray films should be handed over to CWC-certified biomedical waste carrier for disposal and recycling. Needles should be mutilated by needle destroyers/cutters before disposing off syringes.[4]

Waste containers are burnt such that they emit carbon dioxide and water.

CONCLUSION

Biomedical waste management has recently emerged as an issue of major concern not only to hospitals, nursing home authorities but also to the environmental and law enforcement agencies, media and the general public.[17] Waste management plays a key role in human activities. Various ways of managing solid waste includes disposal by either burying or burning, reduce or reusing, recycling and energy regeneration.[18]

Regular monitoring and training is required at all levels.[19] It is our duty to respect and safeguard the environment health.[20] Waste management calls for concern, motivation, awareness, education, low cost programs for healthcare practitioners and the public. This step will positively remove and minimize the hazards and harmful effects of the wastes emanating from various hospitals and clinics.

REFERENCES