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# **Training the Hospital** Staff: A Path towards better management of **Biomedical waste**

Abstract

Biomedical waste management is an essential, fundamental and important activity of all hospitals. The healthcare delivery system, environmental health practitioners, and the waste management authorities have also become much more sensitive to public concern. From a responsible public and environmental health perspective, it is critical that the response to perceived risk issues be with the same degree of professional concern and attention as any other public health matter. The public has every right to expect that BMW will be managed in an effective, safe, and responsible manner. This article is an attempt to refresh and enhance the knowledge about the importance of training on Biomedical waste management. Biomedical waste consists of solids, liquids, sharps and laboratory waste that are potentially infectious or dangerous and are considered biowaste. It must be properly managed to protect the general public, specifically healthcare and sanitation workers who are regularly exposed to biomedical waste as an occupational hazard. Effective training would ensure proper management of Biomedical wastes.

Biomedical waste results from the provision of human or animal health care, related medical research and teaching, the operation of laboratories, morgues and funeral establishments, the use of biotechnology (such as the production and testing of vaccines), and from mobile health care activities. The waste produced in the course of health care activities carries a higher potential for infection and injury than any other type of waste. Major hospitals contribute substantially to the quantum of biomedical waste generated. Smaller hospitals, nursing homes, clinics, pathological laboratories, blood banks, etc also contribute a major chunk.

# Types of medical wastes

- Human anatomical waste: consisting of tissues, organs and body parts excluding teeth, hair and nails.
- Animal wastes: consisting of all tissues, organs and body parts.
- Non-anatomical wastes: human and animal specimens, culture or
- Sharps: needles, needles attached to syringes, and blades, broken glass.



- 5 Non Hazardous waste: Non-infected plastic, cardboard, packaging material, paper etc.
- 6 Radioactive waste, discarded glass, chemical waste, cytotoxic waste, incinerated waste etc.

# **Biomedical Waste Rules, 1998**

Keeping in view inappropriate Biomedical waste management, the Ministry of Environment and Forests notified the "Biomedical Waste (management and handling) Rules, 1998" in July 1998. In accordance with these Rules (Rule 4), it is the duty of every "occupier" i.e. a person who has the control over the institution and or its premises, to take all steps to ensure that waste generated is handled without any adverse effect to human health and environment. Handling, segregation, mutilation, disinfection, storage, transportation and final disposal are vital steps for safe and scientific management of BMW in any establishment. Schedule I of the Bio-Medical rules contains the categories of Biomedical Waste Schedule II contains the Color coding and the type of container for disposal of different Biomedical waste categories.

# Dangers to the community through biomedical waste

According to various surveys and reports, of the total waste generated by hospitals only 10-15 percent is infectious and needs treatment. If all the waste is mixed, the entire waste generated by a hospital becomes infected as the quantity of waste to be treated increases, the hospital fails to treat all its waste and a large chunk of this infectious waste reaches municipal dumps, and increases the possibility of spreading infection.

### Who requires waste management training?

In order to ensure that all waste is segregated and safely transported, and that the material required for waste management is available to the staff, it is important to involve everyone, including Doctors, administration, nurses, technicians, ward boys and safai karak charis.

#### **Awareness**

Posters, circulars and hospital magazines can be used to disseminate timely information on medical waste and its treatment. Posters can serve as a continuous reminder of existing waste management schemes. They would also help sensitive new staff and visitors to the hospital.

Staff meetings are also a good forum to raise awareness and discuss issues pertaining to biomedical waste management.

Various incentives can be introduced to encourage people to follow the correct waste management techniques.

# **Training in hospital housekeeping**

The biomedical waste management training involves hands on experience with applications designed to provide the highest quality management services. The workshops and on-job training programs are designed to equip the hospital staff with knowledge on:

- Support services needed by medical facilities.
- Developing expertise and team spirit within the system to create awareness about biomedical waste.
- Delivering reliable, high quality and cost-effective housekeeping services.
- Endeavoring to exceed expectations for cleanliness with regard to biomedical waste.

The training must be offered at both, management and entry-level. These programs cover all aspects of housekeeping management that affect public health, with the help of professional faculty. Hospital housekeeping renders services that are supposed to compliment the delivery of accurate medication keeping in mind the hazards caused by the biomedical wastes.

There are many instances on record that are related to delay in the restoration of mental health and kids' health as well as administration of alternative medicines and holistic medicines due to shortcomings within the housekeeping department. Hence, employers must be cautious and generally avoid taking on untrained hands.

The housekeeping department in a hospital features at the very core of day-to-day activities. The department is as versatile as its staff. The staff delivering housekeeping is required to deliver the best in hygiene. The term is an extension of 'house' and 'keeping'. Literally, the correct understanding of what the term implies comes from the challenges faced to keep a clean and disease free home. Only here the hospital becomes home, the temporary home to patients. Hospital housekeeping is a department that is incorporated within the core activities of the unit. The department is probably second in size only to the structure. It is not uncommon to see more housekeeping staff than doctors. This makes it even more important that the housekeeping staff is aware of the various aspects of biomedical waste management.

# **Suggested Training Sessions**

Training on biomedical waste should be divided into various sessions. The first session could be devoted to sensitizing the hospital staff on the need to manage the biomedical waste in the hospitals. In the second session they could be made aware of the various aspects of hospital waste management- segregation, disinfection, etc. The last session must be taken only after the trainees have implemented the scheme for about few weeks. The trainees must be asked about the problems that they have faced during the implementation of the programme. It



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must be ensured that the training sessions are lively. It must start on a formal note but should be made informal, and it should be interactive at all the stages.

Training module should include equipment and other materials to be used later by the staff for waste management. As far as possible, all training modules should be in vernacular medium, or the language in which the staff is most comfortable

Demonstration and live acts would help in making the training sessions interesting and therefore making trainees understand things faster.

#### Conclusion

In recent time there is an increasing need about the training of hospital staff about the harmful effects of biomedical waste generated by health care facilities. General public, law enforcement agencies of the Government, the media, and also the social activists are continuously focusing on the lack of concentrated effort in management of biomedical waste in our country. Seminars, symposia and conferences are also being held by hospital administrators, clinicians and nursing professionals to update the knowledge and understanding on the issues. It is ironical that many countries have been struggling to master the simple color coding, even 10 years after it was first devised to hygienically manage hospital waste. Hospitals and

nursing homes have not yet learnt that discarded medicines go into black plastic bags, body parts into yellow and laboratory waste into red bags.

Training and creating awareness amongst the hospital staff is the key to having a good waste management system. Training can be done in a particular ward initially where a model system could be established. This ward/department can be used in further training sessions as a practical model for trainees. Thus there must be effective training sessions on biomedical waste management: from medical students to practicing professionals, and ward boys to nursing staff. Proper training would help to ensure the better implementation of biomedical waste management programmes.

## References:

- 1. Ruff GG Jr., Environmental laws in health care. Hosp Material management. Q,1992; 14(2):28-39.
- 2. Report of High Power Committee on Urban-Solid Waste Management, Planning Commission, Govt. ofIndia, Hospital waste management. 1995; 35-47.
- 3. Guidelines for protecting the safety and health of health workers. NIOSH/Health Care Workers guidelines / Chap 6
- 4. Rutala WA, Mayhall CG. SHEA Portion paper, 1992, 13:38-48
- URL:http://www.hse.gor.uk.ntdir/noframep/agent/pof catefonnent of biological agent according to hared and, containment 4thed, 1995; IInd suppl.
- 6. Http://220.156.188.21/CDAC/ASCNT\_2009/ASCNT
- 7. Http://en.wikipedia.org/wiki/Biomedical\_waste
- 8. Http://www.ene.gov.on.ca/envision/gp/425e.pdf
- Http://www.cpcb.nic.in/Highlights/2006/ BIOMEDICALWASTEMANAGEMENT%5B1%5D.pdf