ACKNOWLEDGEMENT

I hereby take this opportunity to thank Dr V M Agarwal, Medical Superintendent, Dr Baba Saheb Ambedkar Hospital, for granting me the opportunity to work in esteemed organization that gave me the scope for exploring the functioning of a government hospital, which was a learning experience for me.

I would like to express my heartfelt thanks & gratitude to Dr.S K Malhotra (organization mentor), without whom this project would not have been a reality. He shared his vast experience in the field of medicine and helped me in enhancing the understanding of the subject.

I want to thank all the staff of Dr BSA Hospital for all their help, support, interest & valuable hints .

My sincere acknowledgement goes to Prof. Maitreyi Kollegal, Director, IIHMR New Delhi, and Prof. Indrajit Bhattacharya (Mentor), IIHMR, who gave me the encouragement and guidance.

Last but not the least I would like to thank my family for being the pillar of support for throughout my life.

Thank You,

Neha Gupta

ABSTRACT

Hospital is a place where patients with various infections are treated and in due course lot of infectious waste is generated. This waste is referred to as Biomedical waste (BMW). The Biomedical Waste generated could cause serious hazards to health and environment in case of indiscriminate management. To avoid these hazards, discriminate waste management system should be implemented in every hospital, clinic, Nursing Home etc.

The Objectives and rationale of BMW management are mainly to reduce waste generation, efficient collection, handling and disposal in such a way that it controls spread of infection and provides safety to employees working in the system and community at large. Accordingly, waste is required to be treated and disposed of in accordance with schedules prescribed. The basic elements is to recognize the waste, identify where waste is generated and determine the cause of generation, plan disposal of the waste in a scientific manner so as to render it environmentally non-hazardous and eliminate the source of infection.

Hence the current status of employee's awareness about biomedical waste management will help the authorities to create strategy for improving the status in future. The study thus focuses to assess the knowledge, attitude and practice of biomedical waste management in Dr Baba Saheb Ambedkar Hospital, New Delhi.

Objective

The objective of the study was to

1. Know the existing Biomedical Waste management practice in the hospital
2. Assess the knowledge, Attitude and Practice (KAP) of Doctors, Nurses and Paramedical staff about biomedical waste management

The research methods used were qualitative and quantitative analysis. Primary data was collected through direct observation and a structured questionnaire. In the questionnaire various components were included to assess knowledge, attitude and practice of biomedical waste.

Major findings

KAP study reflects that almost half of the key players in generation handling of biomedical waste (doctors, nurses and paramedics) are not aware of existence of biomedical waste on human health and environment. Knowledge of nurses and paramedics was found quite low in comparison to doctors. Though the staff is aware of the risks associated with handling of biomedical waste, only very few of them use personal protective clothing. The data shows that the staff is concerned about his/her health and report all the adverse incidence to the higher authority. Only half of the total staff population have undergone training programme on BMW. About 2/3 of the staff is willing to attend a training programme on BMW even if it is being provided during a time period other than duty hours. The hospital does not have a well planned awareness and training programme for biomedical waste management and there is no orientation programme for the newly appointed staff.

Conclusion

In the field of medical practice statutory public health guidelines for Biomedical waste Management and close monitoring of its compliance alone cannot achieve the ultimate goal, if it is not accompanied with social science approach of mass education motivation and change of mind set in all strata of medical practice. Continuous logistic support and user friendly approach is equally important while implementing in the process of any rules, regulations concerning the medical practice other than the core mandate area they are assigned to.

The hospital must have well planned awareness and training programme for all category of personnel (doctors, nurses and paramedics) those who are directly involved in handling of biomedical waste. Workshops, seminars, exhibition etc. must be organized from time to time with representatives from various units related to bio-medical waste management Employees should be also be encouraged to use universal personal protective equipments to reduce risks related to handling of BMW. Measures should be adopted to ensure that all staff is vaccinated against Hepatitis-B and Tetanus.

List of figures

List of tables

List of Appendices

List of abbreviations

BMW	Biomedical waste
HIV	Human immunodeficiency virus
HBV	Hepatitis B virus
WHO	World Health Organization
AIDS	Acquired immune deficiency syndrome
TB	Tuberculosis
FRU	First referral units