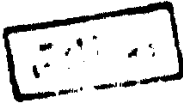


# Health Education on Hospital Waste Management Among Health Care Workers

Thesis submitted for partial fulfillment of Master Degree  
in Occupational Medicine



By

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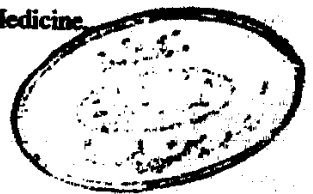
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# **INTRODUCTION**



## INTRODUCTION

Hazardous waste is an inevitable result of modern life. Hospitals and clinics have been mistakenly assumed to be healthy places to work. A substantial amount of hospital waste is generated in Egypt. The National Environmental Action Plan assumes it 0.8% of municipal waste of which 20% is hazardous. Hazardous waste is estimated to be 13,000 tons per year. Moreover, the hazardous portion is generally mixed with a larger amount of hospital waste which in turn, is in most instances, disposed of with municipal waste. The multiplier effect of a minor and potentially controllable portion of waste is therefore alarming, (*Abou El-Atta, 1994*).

Health care workers are exposed to a wide range of hazards due to exposure to hazardous hospital waste. Hospital solid waste because it is handled inside and outside a health care facility, exposes also the general population and the environment to its adverse impacts, (*WHO, 1983*).

Health care workers are at a high risk of exposure to Hepatitis B (HBV) Virus, Hepatitis C Virus (HCV) and Human Immunodeficiency Virus (HIV). HIV protein (as well as antibodies to HIV) have been detected in residual blood left on both needles and glass fragments from vials containing HIV infected blood. After a needlestick, the occupational risk of HBV to health care workers have been estimated to be between 23% and 43%, (*Jaffe and Schnitt, 1992*).

Despite the significance of occupational health hazards that result from improper waste handling, collection and disposal inside and outside a health care facility, very little attention has been paid to date to the practices employed in the management of this special type of waste, particularly in developing countries, (*El-Naggar, 1994*).

Dangers arising from improper management of hospital waste are numerous. Not only health care workers , but also patients and relatives especially children come in contact with the waste and are exposed to infection, especially from needles and other sharps. Discarded drugs can be found fairly often in hospital grounds, and may be collected and consumed or sold without professional advice. In addition to the health hazards, ecological risks have to be considered, such as microbiological and chemical contamination of soil and groundwater and poisonous emissions from burning plastics. An important reason for the inadequate treatment of hospital waste is the widespread lack of knowledge among local health personnel, ( *Halbwachs, 1994*).

# AIM OF THE WORK

