

# Quantitative study of medical waste

## Case Study: Hospitals affiliated to the Tabriz university of medical sciences

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### Original Article

#### Abstract

**Introduction:** Medical wastes have high sensitivity in many countries due to containing hazardous, toxic and pathogenic agents. Proper medical waste management has an important role in controlling environmental pollutions. In this study, medical waste management in all affiliated hospitals of Tabriz University of Medical Sciences was investigated with the purpose of providing proper information for comprehensive planning and enhancing quality of health services in future.

**Methods:** Information were gathered by completing the questionnaire, interviews and weighting the wastes of hospitals during 2010-2011.

**Results:** Hospitals had 2283 active beds, capita waste generation was calculated 3.79 kg/d. According to the cluster Analysis based on waste production, this hospitals were divided in to four separated groups. The comparison of status of the hospitals staffing with standard of Medical buildings housing Research Company of Iran showed that some hospitals are facing with lack of service personnel that can affect medical waste management in these hospitals. All hospitals use autoclave instrument for treating the medical wastes. Also, the average production rate of general wastes, infectious and chemical wastes, sharp wastes and the pathological wastes were calculated 2.75, 0.875, 0.128 and 0.043 kg/d per bed, respectively

**Discussion and Conclusion:** The medical waste management in studied hospitals is almost in a good condition but it needs more attention in some aspects.

**Key words:** Medical waste management, Treating, Cluster analysis, Tabriz

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