

عنوان مقاله:

Assessing the Rate of Recyclable Plastic Wastes and Recycling Economic Value in Hospitals of Yazd in ۲۰۲۲

محل انتشار:

فصلنامه بهداشت محیط و توسعه پایدار، دوره 9، شماره 1 (سال: 1402)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Masoumeh Bagheri - Environmental Science and Technology Research Center, Department of Environmental Health Engineering, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Ehsan Abouee Mehrizi - Environmental Science and Technology Research Center, Department of Environmental Health Engineering, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Roghayyeh Koupal - Volunteer at Northshore Health System IL, US

Mehdi Mokhtari - Environmental Science and Technology Research Center, Department of Environmental Health Engineering, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

خلاصه مقاله:

Introduction: Special and infectious wastes are the most significant wastes generated in hospitals, health centers, and similar facilities. Reducing and recycling such wastes at the source pose significant challenges to waste management. Therefore, this study assesses the components of healthcare waste in terms of their recyclability, emphasizing different types of plastic. **Materials and Methods:** Data collection involved sampling normal and infectious waste in selected hospitals over three months using monthly checklists. The total waste generated in these hospitals was analyzed on a daily basis. Moreover, the average microbial load of infectious waste was determined through microbial strip tests and biological tests following patient companion. Tests were performed with the acceptable performance of safe hospital devices with the destruction of microorganisms. **Results:** Average waste composition in the selected hospitals included ۶۵-۷۰% general waste and ۳۰-۳۵% infectious waste. The most common generated infectious waste was polyethylene (PE) sets (۸۰۰ kg/month), while the predominant general waste was nylon bags for polyethylene terephthalate (PETE) packaging (۵۲۰ kg/month). Hospital ۱ had the highest per capita production of recyclable waste, generating ۷,۹۰۰ kg and ۲,۵۵۰ kg of normal and infectious waste per month, respectively. The total revenue generated from selling normal and infectious plastic waste was ۱.۴ and ۰.۲, respectively. **Conclusion:** The mixing of waste can be prevented by properly segregating normal and infectious waste and adequate staff training. Given the escalating disposal costs of health-care waste (HCW) and the shrinking space in landfills, efforts to minimize waste generation are crucial for effective recycling and reuse processes.

کلمات کلیدی:

Equipment Reuse, Medical Waste Disposal, Economic, Recycle, Hospital

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1940124>



