

ABSTRACT 05

Inpatient Plate Waste Generation In Hospital Sultan Abdul Aziz Shah, Universiti Putra Malaysia: A Cross-Sectional Study

Nur Ikhwana Afiqah Kassim¹, Syafiqah Rahamat^{1,2}, Nurul Asyiqin Hashim¹

Objectives: Plate waste is a significant issue in hospitals worldwide due to its detrimental effects on patient well-being, hospital finances, and environment when it surpasses safe threshold. However, the lack of data on plate waste in Hospital Sultan Abdul Aziz Shah (HSAAS), Universiti Putra Malaysia, limits the hospital's ability to assess inpatients' food intake adequacy and foodservice performance. This study aimed to quantify inpatient plate waste and examine the differences in plate waste generation across various sociodemographic and clinical characteristics. **Methods:** This cross-sectional study involved 239 plate waste samples from inpatients at HSAAS. Plate waste was estimated using the Comstock 6-point scale and a modified version of the scale. Sociodemographic and clinical data were collected through an electronic self-administrated questionnaire via Google Forms. Data were analyzed using IBM SPSS version 27, and comparisons of plate waste generation were made across sociodemographic and clinical subgroups. **Results:** The mean age of respondents was 53.15 ± 17.93 years. Most respondents were Malay ($n = 196$), had tertiary education ($n = 42$), were married ($n = 61$), not working ($n = 49$), had an ideal body weight ($n = 24$), received therapeutic diets ($n = 145$), and were admitted to the Orthopaedic ward ($n = 68$). In general, nearly half of the food served (48.1%) was discarded by inpatients. Vegetables are the most wasted food ($45.5\% \pm 43.8$), followed by protein, carbohydrate, and fruits/desserts. Significant differences in plate waste were observed across marital status, nutritional status, and diet type ($p < 0.05$). However, no significant differences in plate waste generation were found between sex, age, race, education, occupation, or ward type. **Conclusion:** Inpatient food waste at HSAAS is high, indicating a need for further research and interventions to reduce plate waste to a safer level.

Keywords: Plate waste, foodservice, hospital inpatient, teaching hospital

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1. Department of Dietetics, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
2. Department of Dietetics, Hospital Sultan Abdul Aziz Shah Universiti Putra Malaysia (HSAAS UPM), 43400 Serdang, Selangor, Malaysia.

Correspondence to: Dr. Syafiqah Rahamat. Department of Dietetics, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. Email: syafiqahrahamat@upm.edu.my