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Abstract

Background: The COVID-19 pandemic has caused an increase in medical waste in hospitals.

Aims: To evaluate how the COVID-19 pandemic is affecting medical waste management in hospitals in Isparta Province, south-western Türkiye.

Methods: We examined medical waste production in 3 different types of hospital (1 private, 1 public and 1 university) in Isparta Province, south-western Türkiye. We compared the number of patients, amount of medical waste and occupancy rates of the 3 hospitals during the pre-pandemic (2019–2020) and pandemic (2020–2021) periods. The data were analysed using SPSS, version 22.0, and statistical significance was set at P 0.05 for comparisons of the Kolmogorov–Smirnov test and where skewness and kurtosis index values were less than 2 times the standard error. Data were presented as descriptive statistics (mean, standard deviation) and by analysing using hypothesis testing; parametric tests were used in all hypothesis tests. The Pearson test was used to assess all correlations between number of patients, occupancy rate and amount of medical waste. We used 1-way analysis of variance (ANOVA) to compare the hospitals in terms of patient numbers, occupancy rate and amount of medical waste and to determine any differences in these parameters over 3-month periods in each of the hospitals. The post hoc Bonferoni test was used to detect the groups that showed a difference after ANOVA. For each hospital, the paired t-test was used to identify any difference between the pre-pandemic and the pandemic periods in terms of patient numbers, occupancy rate and amount of medical waste. Statistical significance was set at P