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## **ASSESSMENT OF SUSTAINABLE WATER MANAGEMENT IN PUBLIC HOSPITALS: THE CASE OF TURKEY**

**Arzu Teksoy, Kader Altan\***

*Department of Environmental Engineering, Bursa Uludag University, 16059 Nilüfer, Bursa, Turkey*

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### **Abstract**

The health sector is the third-largest water consumer in the commercial sector. Saving water by reducing unnecessary usage in hospitals, preventing water waste, controlled disposal and reuse of wastewater, and monitoring the water cycle are basic requirements of sustainable water management. In this study, a survey was conducted on water saving and sustainable water management in 118 public hospitals in Turkey from 2020 to 2021. The mean annual water consumption of public hospitals in Turkey was estimated as 192.26 m<sup>3</sup> per bed at the end of the survey. The annual average water consumption in a public hospital was calculated with the equation:  $168.90 * NB + 3,973.68$ , assuming  $NB$  as the number of beds. The results showed that the primary sustainable water management measures taken in the examined hospitals were the regular inspection of the sanitary system against leaks (92.3%) and the creation of a water management plan (90.6%) for the control of the growth of *Legionella* (Legionnaires) bacteria. It was determined that issues such as collecting rainwater (1.7%), automatic shut-off mechanisms (14.5%), warning texts and training programs for water saving (0.8%), reuse of water (3.4%), advanced water treatment (0.9%), and lack of assigned staff (29.7%) for sustainable water management require improvement.

**Key words:** hospitals, pandemic, public health, sustainability, water consumption, water saving

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\* Author to whom all correspondence should be addressed: e-mail: 511704001@ogr.uludag.edu.tr; Phone: +90 266 2021010; Fax: +90 266 2417473