



ITALIAN AND JAPANESE PUBLIC ATTENTION TOWARD BALNEOTHERAPY IN THE COVID-19 ERA

¹MACCARONE Maria Chiara, ²KAMIOKA Hiroharu, ³CHELESCHI Sara, ³TENTI Sara,
⁴MASIERO Stefano, ⁵KARDEŞ Sinan

Editor: Constantin MUNTEANU, E-mail: office@bioclima.ro



Balneo and PRM Research Journal

DOI: <http://dx.doi.org/10.12680/balneo.2021.452>

Vol.12, No.3 September 2021

p: A03

¹Physical Medicine and Rehabilitation School, University of Padova, Padua, Italy

e-mail: mariachiara.maccarone93@gmail.com

²Faculty of Regional Environment Science, Tokyo University of Agriculture, Tokyo, Japan

³Rheumatology Unit, Department of Medicine, Surgery and Neuroscience, Azienda Ospedaliera Universitaria Senese, Siena, Italy

⁴Rehabilitation Unit, Department of Neuroscience, University of Padova, Padua, Italy

⁵Department of Medical Ecology and Hydroclimatology, Istanbul Faculty of Medicine, Istanbul University, Istanbul, Turkey

Abstract

Introduction: Italian and Japanese populations widely use balneotherapy (BT). The interest in BT during coronavirus disease-2019 (COVID-19) era should be investigated. We aimed to exploit Google Trends analysis as a measure of interest in BT in Italy and Japan.

Materials and Methods: Google Trends was queried for the lay terms used by the Italian population to refer to the BT setting (terme + termale), and by the Japanese to refer to BT facilities (温泉 + スパ). The internet searches in 2020 were compared to overlapping time spans in 2016–2019 and were correlated with new confirmed cases/deaths.

Results: From February 23 to June 20, 2020, and from October 4 to December 26, 2020, the Italian searches were statistically significantly decreased; however, the internet searches were not significantly different in June 21 to October 3, 2020, compared to overlapping time spans in 2016–2019.

From March 15 to September 5, 2020, and from November 29 to December 26, 2020, the Japanese searches were statistically significantly decreased; the internet searches were significantly increased in September 13 to November 7, 2020, and were not significantly different in November 8 to 28, 2020, compared to overlapping time spans in 2016–2019.

There were significant negative correlations between the relative search volume and number of new cases ($\rho = -0.634$; $p < 0.001$)/deaths ($\rho = -0.856$; $p < 0.001$) in Italy and the number of new deaths ($\rho = -0.348$; $p = 0.012$) in Japan.

Conclusion: During the early stage of pandemic, the interest was lower, with the decrease of interest preceding the emergency declarations. After this early stage, the interest showed a recovery in both countries. Then, both countries demonstrated a decline in interest, coinciding with the enforcement of new restrictive measures.

The reduction in interest in BT may suggest the need to rethink the role of BT in emergency situations.