



## 595 - EMOTIONAL EXHAUSTION AMONG EUROPEANS HEALTHCARE WORKERS WITH LONG COVID AND THE MEDIATING ROLE OF EFFORT-REWARD IMBALANCE

R.K. Gan, M. Abedini, G. Fernández-Tardón, M.R. Oñealea, E. Fabiánová, P. Boffetta, P. Arcos González, M.R. Rodríguez Suárez, A. Tardón

*Instituto Universitario de Oncología del Principado de Asturias (IUOPA), Universidad de Oviedo; Health Research Institute of Asturias (ISPA); Medical and Surgical Sciences, University of Bologna; Occupational Medicine Department, University of Medicine and Pharmacy "Carol Davila"; The Regional Authority of Public Health in Banská Bystrica, Department of Occupational Health; Unit for Research in Emergency and Disaster, Universidad de Oviedo.*

### Resumen

**Background/Objectives:** This research aimed to investigate the relationship between long COVID status and emotional exhaustion among European healthcare workers and to explore the potential mediating role of effort-reward imbalance (ERI) in this association.

**Methods:** A cross-sectional survey was conducted from June to September 2023 among HCWs actively employed during the pandemic and enrolled in the ORCHESTRA cohort. HCWs with prior COVID-19 infection were eligible. Data on sociodemographic factors, job characteristics, long COVID status (per WHO guidelines), ERI, and emotional exhaustion (using the ORCHESTRA Emotional Exhaustion Questionnaire) were collected. We performed chi-square tests, t-tests, and causal mediation analyses with bootstrapping.

**Results:** Of 691 HCWs with previous COVID-19 infection, 24% reported long COVID. Spain contributed 117 participants, Romania 346, and Slovakia 228. Overall, 41% of HCWs had high EE, with the highest prevalence in Spain (52%). Mediation analyses showed a significant total effect of long COVID on EE (coefficient 4.06,  $p < 0.001$ ). ERI partially mediated this effect (indirect effect 0.99,  $p < 0.001$ ), accounting for 24% of the total effect.

**Conclusions/Recommendations:** Long COVID is strongly associated with elevated emotional exhaustion in HCWs. ERI emerged as a significant mediator, suggesting that organizational strategies aimed at restoring balanced effort-reward structures could mitigate the impact of long COVID on EE. Targeted individual, organizational, and policy interventions are imperative to sustain HCW well-being in the post-pandemic environment.