Gac Sanit. 2026;40(S4):279

Gaceta Sanitaria

https://www.gacetasanitaria.org

154 - PREVALENCE AND ASSOCIATED FACTORS OF VOICE SYMPTOMS IN PRE-SERVICE TEACHERS: MULTICENTER STUDY IN LATIN AMERICA

L.C. Cantor-Cutiva, M.C. Malebran, A. Díaz, A. Morales, C. Manzano, E. Hunter

East Tennessee State University; Private Practice, Chile; Hospital Policial, Uruguay; Universidad Manuela Beltran; Hospital Medica Sur, Mexico; University of Iowa.

Resumen

Background/Objectives: Teachers report a higher prevalence of voice disorders compared to workers in other occupations, generating significant economic consequences and impact on quality of life. However, there is limited evidence about the onset timing of these disorders. This study aimed to: (1) determine the prevalence of voice symptoms among Latin American pre-service teachers, and (2) characterize associated factors and direct costs of these symptoms during university training.

Methods: Cross-sectional study conducted in 2023 with pre-service teachers from Mexico (n = 1,233), Chile (n = 76), Colombia (n = 113), and Uruguay (n = 154). Participants completed validated Spanish versions of: Voice Symptom Scale (VoiSS), Vocal Fatigue Index (VFI), and Screening Index for Voice Disorder (SIVD). Demographic variables, teaching practice conditions (classroom physical environment, hours of voice use), and healthcare service utilization were assessed. Multivariate logistic regression analyses with binomial distribution and logit link were performed to identify associated factors, expressing the magnitude of association through Odds Ratios (OR) and confidence intervals.

Results: Voice symptom prevalence varied by instrument. However, the most prevalent was physical discomfort associated with voicing (VFI-factor 2) with a prevalence between 55% and 60%. Students in practicum placement were more likely to report vocal tiredness (OR = 2.54) and physical discomfort (OR = 2.09) compared to those not in placements. Perception of dust in the practicum environment was

0213-9111 © 2026 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados

consistently associated with symptoms: voice tiredness (OR = 1.72), dysphonia measured by VoiSS (OR = 2.00), and voice disorder risk by SIVD (OR = 2.08). Hot temperatures were also associated with increased risk (OR = 2.77). Third-year students consistently showed a higher prevalence across all instruments.

Conclusions/Recommendations: Voice symptoms in teachers emerge early during university training, coinciding with the beginning of teaching practice. Adverse environmental conditions (dust, temperature) and year of training are modifiable factors associated with adverse outcomes. We recommend: 1. Implementing primary prevention programs in teacher education, including education on the relationship between working conditions and voice disorders 2. Promoting awareness of voice as an essential work tool from the early stages of training 3. Establishing early detection protocols and access to vocal health services for pre-service teachers.

Funding: NIDCDC of the NIH under Award Number R01DC012315.

0213-9111 © 2026 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados