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2529-993X/

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Epidemiology of tuberculosis in Spain: Areas of improvement in epidemiological surveillance and contributions from the Spanish Network for the Study of Paediatric Tuberculosis[☆]



Epidemiología de la tuberculosis en España: áreas de mejora en la vigilancia epidemiológica y aportaciones desde la Red Española de Estudio de Tuberculosis Pediátrica

Dear Editor,

We read with interest the article by Cano-Portero et al.¹ on the epidemiology of tuberculosis (TB) in Spain in 2015. The work undertaken by the Spanish National Epidemiological Surveillance Network is, in our opinion, of vital importance, since it actively monitors one of the priority lines in the fight against TB.

According to the authors, in 2015, 335 cases of TB were declared in children under 15 years of age in Spain. These data differ from the Report by the European Centre for Disease Prevention and Control (ECDC) for the same year (270 paediatric cases).² This discrepancy highlights the need to improve institutional coordination in order to accurately determine the scope of paediatric TB in Spain.

Spain has a low prevalence of TB, with an incidence of 10.5/100,000 inhabitants in 2015, 7% of which were paediatric cases. Childhood TB continues to be a significant problem in our midst, with Spain being the country with the most paediatric cases in Western Europe.² For decades, childhood TB has been neglected by both national and international policies, due to its lower incidence compared to adults, diagnostic difficulties and its less contagious nature. However, children are particularly vulnerable to TB, with a greater risk of developing severe forms. This is especially the case in those under 2 years of age, where the rate of progression reaches 50%.³ Moreover, children also constitute a sentinel event of recent transmission in the community, and represent a niche for future TB infections. It is therefore paramount that we accurately define the impact of paediatric TB in Spain, establishing measures for the early identification and treatment of high-risk patients.

We would like to use this letter to highlight the work of the Spanish Paediatric TB Network (pTBred),⁴ founded in 2014, which forms part of the European Network (pTBnet).⁵ Among its lines of work, the recording of paediatric cases is particularly notable, broadening the perspective of the Spanish national epidemiological surveillance system. Since 2014, 83 institutions and 141 investigators have taken part, and 570 cases of active TB have been recorded, 47.8% of which correspond to patients under 5 years of age.

The report by Cano-Portero et al. lists the countries of origin of 97% of the cases, grouped as those born in or outside of Spain, with 30% being foreign-born. The country of birth of these foreign-born cases, however, is unknown in 32%. In the pTBred cohort, we

delved deeper into the patients' origin, learning the country of birth of 98.4% of the children (81.1% Spanish) and 98.2% of their parents (55.9% foreign).

The surveillance of these circulating drug-resistant TB strains is one of the current priorities for the epidemiological control of TB.⁶ Monitoring paediatric cases is of great importance, since childhood TB is usually due to a recent primary infection. The reactivation of latent strains is rare. Cano-Portero et al. report 70% confirmed cases, but only have sensitivity results for 26% and do not provide details of the isoniazid resistance rate. The study also reports no age-disaggregated data. In our registry, the confirmation rate is 36.9%, which coincides with the literature.⁷ 11.2% of the children presented some form of drug resistance, with 5.6% resistant to isoniazid and 1% multidrug-resistant (MDR). Notably, the most recent annual report by the ECDC² also provided no data on drug-resistant TB in Spain, in contrast to other European countries, despite Spain being one of the countries with the highest levels of immigration from Eastern Europe, where MDR TB is a monumental problem.

Although TB is one of the priorities of Public Health, there are still important gaps regarding the situation in Spain. pTBred is working incredibly hard to improve knowledge on the epidemiology and usefulness of new diagnostic and therapeutic tools in children. In our opinion, the data on this cohort may shed more light on paediatric TB, a sentinel of overall TB in Spain, especially when data on circulating drug-resistant strains are provided. We agree with Cano-Portero et al. concerning the need to establish a political commitment and to improve intersectoral cooperation, following the recommendations of the WHO's Global Strategy,⁸ to advance towards global TB control.

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DOI of refers to article: <https://doi.org/10.1016/j.eimc.2018.04.007>

[☆] Please cite this article as: Aguilera-Alonso D, Santiago-García B, Mellado-Peña MJ. Epidemiología de la tuberculosis en España: áreas de mejora en la vigilancia epidemiológica y aportaciones desde la Red Española de Estudio de Tuberculosis Pediátrica. *Enferm Infecc Microbiol Clin.* 2019;**37**:68–69.

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2529-993X/

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