



## CORRESPONDENCE

## Underestimated asthma prevalence in Guarda's district leads to overestimated hospitalizations



Dear Editor,

As pulmonologists in Guarda's Local Health Unit, we cannot avoid commenting on the editorial published in March 2023 in *Pulmonology Journal*<sup>1</sup> as it greatly concerns us.

The article states that, in mainland Portugal, the Guarda district has the most prevalence-adjusted asthma hospital admissions. These results are based on an asthma prevalence in the Guarda district of 1.7%. That estimated prevalence is, by far, the lowest in mainland Portugal. The lowest after Guarda is the Braga district, with 4.2% (2.5 times higher than in our district).

The reference for this data is the Portuguese National Asthma Survey,<sup>2</sup> published in 2010. However, there is no detailed data on asthma prevalence by district in that study. The results are presented by region, with a prevalence of asthma of 6.2% in the centre of Portugal (location of Guarda). This prevalence includes our neighbouring districts, where patients have similar characteristics:

- 5.2% in Viseu (more than three times higher than the estimated prevalence in Guarda)
- 4.95% in Castelo Branco (2.9 times higher than the estimated prevalence in Guarda).

It is therefore impossible to know where the data for the Guarda district was found.

According to the Portuguese census of 2021, the population in Guarda's Local Health Unit area is 137,788 inhabitants.

In our hospital, we conduct severe asthma consultations. In 2022, we observed a total of 238 patients. GINA estimates that 3.7% of asthma patients worldwide have severe asthma. This statistic allows us to infer that, given our consultation data compared to the Guarda district population, we

obtained circa 6432 patients with asthma in the Guarda district. This number gives us an estimated asthma prevalence in the Guarda district of 4.67% - a significantly higher percentage than the one mentioned in the editorial abovementioned. Moreover, that is a low estimate since not all patients with severe asthma in the Guarda district have medical records in our hospital.

Therefore, the prevalence of asthma in the Guarda district is underestimated and distorts the prevalence-adjusted asthma hospital admissions, skewing the study's conclusions.

### Conflicts of interest

The authors have no conflicts of interest to declare.

### References

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