

De Menezes F¹, Oliveira WA², Sauter IP², Sarmiento TT³

¹Chiesi Brasil, São Paulo, São Paulo, Brazil, ²Chiesi Brasil, SÃO PAULO, SÃO PAULO, Brazil, ³Precision Data, SÃO PAULO, SÃO PAULO, Brazil

INTRODUCTION & OBJECTIVES

Integration, universality, and equity are the principles that guide the National Health system in Brazil (SUS). The estimated prevalence of chronic obstructive pulmonary disease (COPD) could be approximately 17% in Brazil [1].

Despite the existence of a Clinical Guideline (CG) for COPD management, delivering the recommended treatments to the entire Brazilian population (over 200 million inhabitants distributed across 5570 cities) can be challenging.

This research aims to evaluate the population's access to treatments outlined in the COPD CG across the Brazilian's geographic regions, also stratifying according to the Average of Human Development Index (A-HDI) in municipalities [2].

METHODS

Outpatient data from the Data SUS (SUS database), was used, during the years 2017-2019 and 2022-2023, omitting 2020-2021 due to potential COVID-19 impact.

The A-HDI of each municipality was used as a stratification criterion for comparing the results. The main outcomes were the access to health technologies from the CG and consistency to drug dispensation. Consistency was defined as recurrent dispensing within a two-month tolerance.

Since the data is available through open access, anonymized for patient privacy, ethical approval was not required

RESULTS

252,463 patients were identified, with 136,061 (53.9%) being female. There were 15,975,780 dispensations of drugs recommended in COPD CG. South region had the highest prevalence with 156.9 patients/100,000 inhabitants.

Patients in municipalities with the lowest A-HDI had worse access to therapies (72.6%) and dispensation consistency (44.7%) compared to those in the highest A-HDI (78.1% and 51.3%, respectively), with both comparisons being statistically significant (p-value < 0.001) (Table 1). Bottom municipalities (in terms of A-HDI) had the highest LABA/LAMA utilization rate (28.2%) (Table 2).

Table 1. Access to treatments and adherence according to municipality's HDI

Municipality's HDI category	Access to COPD treatments	Consistency to drug dispensation*
Top 10% municipalities	78.10%	51.33%
Between 50% and 10%	77.20%	48.27%
Bottom 50% municipalities	72.59%	44.70%

* Consistency to drug dispensation is defined as the absence of gaps longer than 90 days between each dispensation for the same drug.

Table 2. LABA/LAMA utilization rate according to municipality's HDI

Municipality's HDI category	LABA/LAMA utilization
Top 10% municipalities	26.99%
Between 50% and 10%	23.55%
Bottom 50% municipalities	28.21%

CONCLUSIONS

This research showed that lower A-HDI is linked to worse dispensation consistency and access to treatments, not complying with SUS's equity principle.

Additionally, the 252,463 patients identified are below the estimated prevalence [1], highlighting underreporting and underdiagnosis of COPD in Brazil.

The higher utilization rate of LABA/LAMA in less developed municipalities might indicates a worse clinical condition of inhabitant patients, rather than a better access to such medications.

REFERENCES

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CONTACT INFORMATION

Fabiana Gatti de Menezes
E-mail: fabiana.menezes@chiesi.com