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## Letters to the Editor

# Inflammatory Bowel Disease in Latin America: A Systematic Review

We read the article by Calderón et al<sup>1</sup> with great interest. This was a systematic review searching published and unpublished studies from January 2000 to September 2015 to estimate the epidemiology and burden of inflammatory bowel disease (IBD) in Latin America. We agree that the burden of IBD in our region seems to be important, besides that there is a considerable gap of evidence in the different studies. Recently, Bernstein<sup>2</sup> has shown that different types of registries can provide analysis of diverse epidemiological questions. The development of adequate records would allow us to know whether there really is a difference in the development and evolution of IBD between the Hispanic and non-Hispanic population,<sup>3,4</sup> and even to know whether there are variances between the different countries of Latin America. The rapid increase in incidence in parallel to the change in lifestyles could explain the key role of the environment in the pathogenesis of IBD in our region.<sup>5</sup>

Nevertheless, there are new data that we would like to draw attention to. Since the article by Calderón et al, two Chilean studies have been published during the last 2 years, which bring to our interest and judgment the importance related to the magnitude of IBD in our country. Jaime et al,<sup>6</sup> in a descriptive study based on data obtained from the website of the Department of

Health Statistics and Information of the Chilean Ministry of Health, conclude that in the period between 2001 and 2012 there has been a significant increase in the number of patients hospitalized with IBD. With regard to the length of stay, hospitalizations due to ulcerative colitis (UC) were significantly lengthier than those due to Crohn disease (CD) (7 days vs 4 days;  $P < .001$ ). The inpatients' mortality rate attributable to IBD was 0.7%. This study also shows a significant inverse association between high latitude/ultraviolet solar radiation and admissions of Chilean patients with IBD. Likewise, our group has recently published that in the past 15 years, a sustained increase in the number of patients diagnosed with IBD has been observed, and significant increases were noted from the comparison of the periods 1971 to 1985, 1986 to 2000, and 2001 to 2015, with 87% of patients diagnosed in the last period. Most patients with CD and UC were diagnosed between the ages of 20 and 29 years, without differences in sex. In relation to the treatment, the use of corticosteroids, immunosuppressives, and biological therapies was significantly higher in patients with CD.<sup>7</sup> This study included 716 Chilean patients with IBD; to date, however, our registry has 1501 patients with IBD (1023 UC, 377 CD, and 101 nonclassified IBD). Figure 1 shows the frequency of patients with

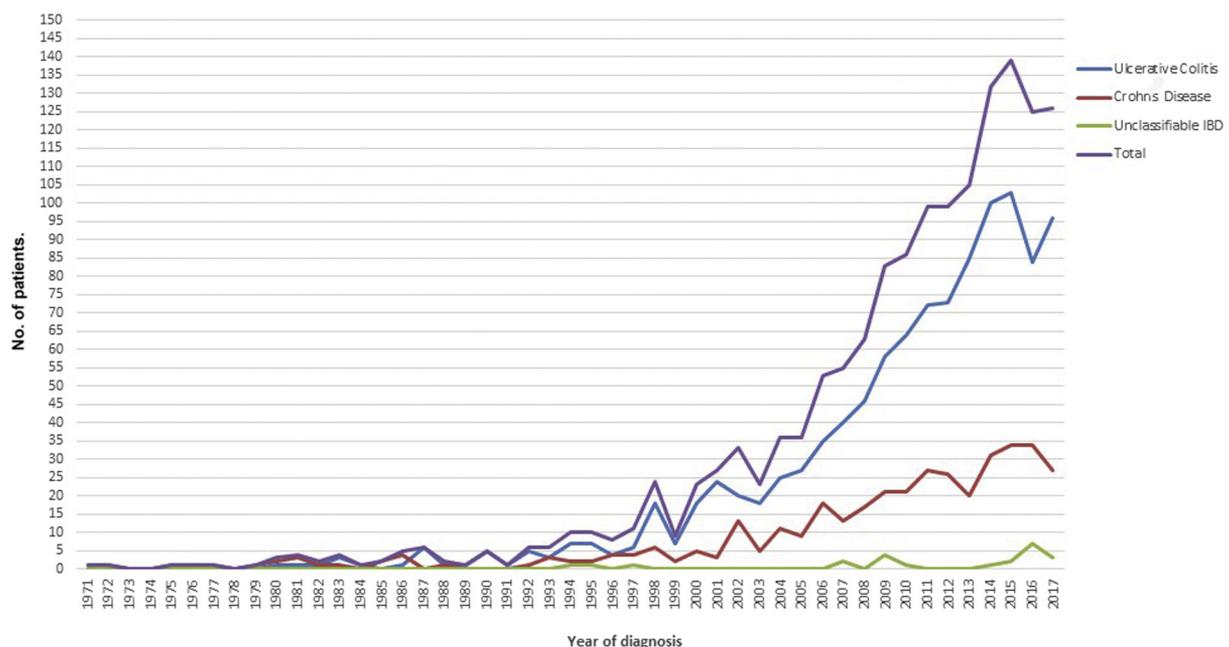


Fig. 1 – Frequency of patients with IBD distributed by year of diagnosis. IBD indicates inflammatory bowel disease.

IBD distributed according to the year of diagnosis (until 2017), confirming that in our local experience there has been an increase in the number of Chilean patients with IBD.

Moreover, during the last 2 years, experiences from other countries have been published. In a Peruvian study with 105 patients with IBD, treatments with mesalamine and corticosteroids were the most common, and the mortality rate attributable to IBD was 5.7%.<sup>8</sup> Nevertheless, Lima Martins et al<sup>9</sup> have shown that in the state of Espírito Santo, Brazil, the prevalence of IBD was 38.2 per 100 000 inhabitants, with that of UC being 24.1 per 100 000 and that of CD being 14.1 per 100 000, which would be within the range reported in the systematic review by Calderón et al. This tendency is, however, higher than in other areas in Brazil, which, according to the authors, could be explained by the number of European immigrants, one of the largest populations of Italians in Brazil.

There is evidence of an increase in the number of patients with IBD in Latin America. Nevertheless, given the limitations and biases of the different published studies, more extensive research should be carried out to elucidate the real incidence, prevalence, epidemiology, and environmental risk factors of IBD in our region. Undoubtedly, this information could be used in the development of accurate health policies to provide a better diagnosis, treatment, and quality of life for Latin American patients with IBD.

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