



Initial Descriptive Epidemiology of Inflammatory Bowel Disease in Northern Central America



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Introduction

- The incidence of IBD is rising globally.
- Latin America has demonstrated an increase in the number of patients with IBD.
- Northern Central America (CA) is the core low- and middle-income countries (LMICs) region in the Western Hemisphere.
- Populations in development transition such as this have seen an increase in GI diseases and cancers.
- The prevalence and general characteristics of IBD behavior remain undetermined in CA.
- We present the initial descriptive epidemiology of IBD in the area.

Methods and Materials

- We conducted a retrospective chart review of five principal hospitals and clinics with practicing gastroenterologists in Guatemala and Honduras.
- Cases were identified based on the international classification of disease (ICD) 10 IBD codes in the last ten years (2010-2020).
- Sociodemographic and clinical characteristics data were collected and analyzed using STATA 17.

Table 1. Clinical-Epidemiological Characteristics

	N (%)	UC	CD	IC
	107	60	20	27
Sociodemographic				
Age, median (IQR), years	42.7 (26.4, 55.4)	37.4 (24.9, 50.7)	44.4 (33.8, 45.9)	55.4 (27.1, 63.5)
Age categories^a				
<18	15 (14.6%)	10 (17%)	3 (17%)	2 (7%)
18-24	10 (9.7%)	5 (9%)	1 (6%)	4 (15%)
25-64	68 (66%)	40 (69%)	13 (72%)	15 (56%)
>64	10 (9.7%)	3 (5%)	1 (6%)	6 (22%)
Sex^b				
Male	59 (56.2%)	28 (47%)	15 (79%)	16 (62%)
Female	46 (43.8%)	32 (53%)	4 (21%)	10 (38%)
Setting				
Urban	64 (59.8%)	37 (62%)	15 (75%)	12 (44%)
Rural	43 (40.2%)	23 (38%)	5 (25%)	15 (56%)
Tobacco	16 (6.68%)	8 (13%)	0 (0%)	8 (30%)
Alcohol	35 (32.7%)	17 (28%)	7 (35%)	11 (41%)
Clinical Characteristics				
Median interval from onset to diagnosis (range) years	1 (1, 2)	1 (1, 2.5)	3 (2, 7)	1 (1, 1)
Clinical Presentation				
Diarrhea	79 (73.8%)	47 (78%)	11 (55%)	21 (78%)
Abdominal Pain	76 (71.0%)	42 (70%)	15 (75%)	19 (70%)
Bloody Diarrhea	40 (37.4%)	28 (47%)	9 (45%)	3 (11%)
Hemoglobin				
<7 g/dl	23 (21.5%)			
7-12 g/dl	53 (49.6%)			
>12 g/dl	23 (21.5%)			
Complications				
Pancolitis	17 (15.9%)	12 (20%)	2 (10%)	3 (11%)
Enteric fistulas	7 (6.5%)	1 (2%)	6 (30%)	0 (0%)
Colon Stenosis	2 (1.9%)	2 (3%)	0 (0%)	0 (0%)
Colon Cancer	1 (0.9%)	1 (2%)	0 (0%)	0 (0%)

Results

- 107 patients with IBD were identified. (UC n=60, CD n=20, and IC=27).
- The median age at diagnosis was 42.7 years (IQR, 24.9, 50.7) in both sexes.
- Males were more commonly affected (56%).
- The mean time between the onset of symptoms and diagnosis was 2.5+/-2.9 SD years.
- Smoking was reported in 16 (6.7%) patients.
- Common clinical presentations were: -Diarrhea, abdominal pain, and anemia.
- The most common complication was enteric fistula (6.5%). Pancolitis was found in 17% and colon cancer in 1% of included patients.
- The most common treatments were systemic steroids. (IC, 74%; UC, 41%, CD 68%) and sulfasalazine (45%).
- Only 17 (15.9%) patients required surgery during the study period, and very few had access to biological agents (13%).

Discussion

- This study supports the clinical impression that IBD is on the rise in CA LMICs settings.
- The most prevalent type of IBD among these populations is UC.
- The use of steroids in this region is high. Moreover, using mesalamine compounds even for CD is common, likely due to the limited access to biologics.
- This study is the first step in describing the characteristics of IBD in the region, and the results can be used to help shape public health strategies in the region.



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