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Background: The incidence and prevalence of ulcerative colitis (UC) and Crohn's disease (CD) is stabilising in the Western world, but increasing in developing countries. Epidemiological data on IBD is lacking from Latin American countries. The aim of this systematic review is to summarise the clinical and epidemiological information on IBD arising from countries in Latin America.

Methods: Three databases (MEDLINE, EMBASE, SciELO) were searched until September 12, 2018 for clinical or epidemiological data on IBD from all Latin American countries and territories. We assessed the following outcomes: incidence and prevalence; ratio of patients diagnosed with UC vs. CD (ratios greater than 1 favour UC); phenotype as defined by the Montreal Classification; proportion of population prescribed IBD medications (i.e., steroids, 5-ASA, immunomodulators, and anti-TNF agents); and proportion of intestinal resections. Choropleth maps of the UC:CD ratio were created using Jenks Natural Breaks.

Results: We identified 1434 abstracts with 126 articles selected for full-text review, and 61 articles were used for data extraction. Incidence and prevalence of IBD is steadily rising throughout Latin America. For example, the incidence of CD in Brazil rose from 0.08 in 1988 to 0.68 (1991–1995) to 5.5 per 100 000 in 2015. The highest reported prevalence of IBD is in Argentina (2007) at 15 and 82 per 100 000 for CD and UC, respectively. The UC:CD ratio exceeds 1 in all regions throughout Latin America with the exception of Brazil where the states of Alagoas, Rio de Janeiro, and Mato Grosso do Sul reported more CD than UC patients

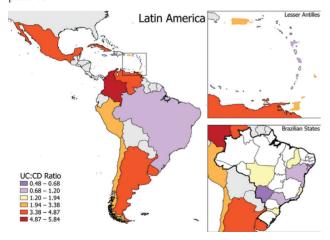


Figure 1. UC:CD ratio map.

The proportion of patients prescribed anti-TNF has steadily risen for CD (e.g. Brazil: 29.6% in 2005–2012 to 43.4% in 2014), but not UC (e.g. Brazil: 4.5% in 2014). Surgery for IBD is overall declining. In contrast, other regions showed stable colectomy rates pre- and post-introduction of anti-TNF for UC: e.g. in Peru, colectomy for UC 6.9% in 2001–2003 and 6.2% in 2004–2014

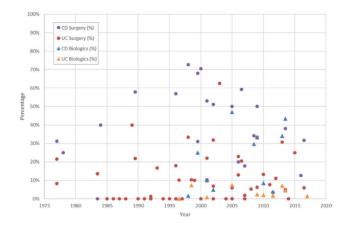


Figure 2. Proportion of Crohn's disease (CD) and ulcerative colitis (UC) patients prescribed anti-TNF therapy and undergoing an intestinal resection in Latin America

Conclusions: The burden of IBD is expanding throughout Latin America. Heterogeneity between countries may offer important clues into the pathogenesis of IBD, as well as identify regions requiring standardisation in management and healthcare delivery. Additional population-based epidemiologic studies are needed to better define the evolving burden of IBD throughout Latin America.

#### P740

# Sexual quality of life in inflammatory bowel disease: a multi-centre, national-level study

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Background: The impact of inflammatory bowel disease (IBD) in sexuality is one of patient's main concerns. Most studies narrowly focus on sexual organic disfunction rather than patient-perceived sexual quality of life. Our aim was to address sexual quality of life in IBD and population controls.

Methods: After an initial pilot study in 2016, the authors conducted a multi-centre, cross-sectional case–control design study, using an anonymous self-administered questionnaire. This multi-modal questionnaire included sociodemographic data and four validated instruments: The Short IBD Questionnaire (SIBDQ), Social Desirability Scale (SDS), Sexual QoL Questionnaire-Male/Female (SQoL-M/F), Nine-item Patient Health Questionnaire (PHQ-9). Results were compared against healthy controls.

Results: 869 patients (575 Crohn's disease, 294 ulcerative colitis) and 398 population controls fulfilled the questionnaire. Patients' gender (52.7% women vs. 47.3% men) and clustered age (47.5% < 40 years old vs. 49.8% ≥40 years old) were adjusted. There was no difference

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for the SDS for IBD and controls (7 vs. 7; p = 0.49), meaning the reliability of responses was homogeneous. IBD patients reported a poorer SQoL (men: 77.3 vs. 83.8, p = 0.007; women: 70.4 vs. 81.6, p < 0.001) and a higher incidence of depression (6 vs.5; p < 0.001) than controls. 189 patients scored for moderate-severe depression indicators. For IBD, SQoL was correlated with health-related QoL (HRQoL) measured by the SIBDQ (men: r = 0.48, women: r = 0.45; p = 0.00), and negatively correlated with depression symptoms (men: r = -0.47, women: r = -0.48; p = 0.00). Similarly, perianal disease was associated with a poorer HRQoL and a higher incidence of depression. However, perianal disease did not impact SQoL for male or female patients. Looking closer into the IBD and controls' SQoL scores, male patients struggled with frustration, depression, anxiety and embarrassment. As for female patients, frustration, depression, anxiety, embarrassment, lack of pleasure and confidence loss were reported. In linear regression analysis for men, SQoL was associated with age, marital status and depression ( $\beta$  –1.87 [IC 95% -2.20 -1.53; p < 0.001). In women, SQoL was associated with depression ( $\beta$  –1.81 [IC 95% –2.11 –1.51]; p < 0.001) only.

Conclusions: IBD patients reported a poorer sexual QoL than healthy controls. Moderate–severe depression was highly reported in IBD and was negatively correlated with SQoL. Similarly to what is reported for disease activity in other studies, perianal disease did not impact SQoL. Patients concerns on sexuality were mostly about emotional issues and self-esteem.

#### P741

## Fine-scale geographic distribution and ecological studies of Crohn's disease in France (2007–2014)

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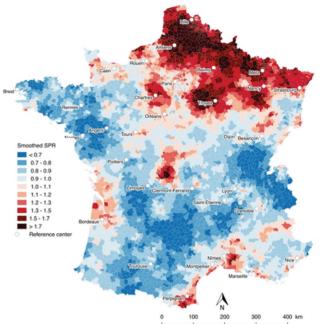
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Background: A significant geographical variation in the incidence of Crohn's disease (CD) suggests the role of environmental factors in its pathogenesis. The objectives of this work were (i) to study the spatial distribution of CD cases in France from the database of the Programme de Médicalisation des Systèmes d'Information (PMSI), (ii) to study the factors associated with spatial heterogeneity and (iii) to identify clusters of high-prevalence.

Methods: Patients with a CD diagnostic code were searched in the PMSI database between 2007 and 2014. To study the spatial distribution of prevalence for this period, a fine-scale spatial unit (5610 units at the national level) was used. The results were expressed as standardised prevalence ratio (SPR). An ecological regression measured the association between the risk of CD and spatial unit characteristics, such as access to the nearest reference centre, urbanisation and rurality, deprivation index (FDep index), latitude, and distance from polluting facilities. Elliptical spatial scan statistics were used to search high-prevalence clusters.

Results: A total of 129089 patients with CD have been identified, with a national prevalence in 2014 of 203/100000 inhabitants. Significant spatial

heterogeneity has been found (p  $\leq$  0.0001) (Figure 1). Ecological regression revealed a significant association between the risk of CD and the highest deprivation index (Relative Risk (RR) = 1.05[1.02–1.08]) and urbanisation (RR=1.08[1.05–1.15]). The spatial analysis detected 16 clusters with a CD relative risk ranging from 1.40[1.31–1.50] to 1.90[1.65–2.19].



Geographical distribution of age-and-gender Standardised Prevalence Ratios of Crohn's disease in France, 2007–2014. Conclusions: The French geographical distribution of CD is not uniformly distributed. Sixteen clusters with high-risk of CD have been identified. The poorest populations and industrialised areas were associated with a higher risk of developing CD.

### P742

# Iranian Registry of Crohn's and Colitis (IRCC): first nation-wide IBD registry in Middle East, a study protocol

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