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Editorial

The prevalence of comorbidities in Irritable Bowel Syndrome requires a comprehensive clinical approach

David B. Páramo-Hernández.[1]

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[1] Gastroenterologist and Clinical Epidemiologist. GutMédica, Instituto de salud digestiva. Editor, Colombian Journal of Gastroenterology. Bogotá, Colombia.

***Correspondence:** David B. Páramo Hernández. paramo.david@gmail.com

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Among functional digestive disorders—now known as *disorders of gut-brain interaction*—irritable bowel syndrome (IBS) is the most prevalent condition globally, estimated at 10% to 15%, with significant regional variations[1]. According to a global study conducted via online data collection in 24 countries and in-person interviews in 7 countries, a prevalence of 4.3% was reported in Colombia using the Rome IV diagnostic criteria in the adult population[2]. The study by Drs. Saade and Roselli[3] estimates a prevalence of 2.7% in the general Colombian population between 2018 and 2022. These two prevalence estimates are relatively low compared to what is commonly observed in clinical practice, likely influenced by the fact that the Ministry of Health's diagnostic records only include patients who seek medical consultation, as well as issues of underreporting, underdiagnosis, or cases where IBS is not the primary diagnosis. Similarly, since it is an online survey with more restrictive diagnostic criteria, such as those used by Rome IV, while sensitivity may improve, significant selection biases could also arise.

The findings of the Saade and Roselli study[3] further support the reality of the gut-brain axis, which is the bidirectional neurohumoral communication system between the brain and the gut. This system continuously sends signals about the homeostatic, physiological, or pathological state of the digestive system to the brain via afferent nerves (spinal and vagal) and humoral pathways of the enteric nervous system or "intestinal brain"[2,4,5]. The efferent response, after central processing—particularly by the insula, amygdala, and perigenual anterior cingulate cortex (areas that simultaneously process visceral sensitivity and our emotional responses)—is directed through descending projections from brainstem nuclei to the rostral ventrolateral medulla and the dorsal horn of the spinal cord, modulating afferent pain transmission at the first synapse[2,4,5]. It is important to note that these projections are primarily opioid-, noradrenergic-, and serotonergic in nature, a fact with significant therapeutic implications[2,4,5].

Within a biopsychosocial conceptual model, there is sufficient evidence regarding the contribution of genetic, epigenetic, and cultural factors. Stressful life events (including sexual abuse, physical maltreatment, and emotional abuse, particularly in childhood) have been proposed as the most influential compared to controls[6]. Precisely due to the bidirectional nature of the gut-brain axis, IBS patients report a higher prevalence of such adverse events, and this history is generally associated with anxiety and depressive disorders, greater severity of functional gastrointestinal disorders (FGIDs), worse clinical outcomes, increased stress, and impaired daily functioning and quality of life[2,4,5].

Among the most frequent comorbidities are affective disorders, particularly anxiety and depression. Systematic reviews indicate that 40% to 60% of IBS patients exhibit

clinically relevant psychiatric symptoms[7]. Additionally, IBS often coexists with other functional chronic pain conditions, such as fibromyalgia, chronic fatigue syndrome, functional dyspepsia, and migraines[8].

The presence of these comorbidities leads to increased healthcare utilization, higher direct and indirect healthcare costs, greater symptom burden, and a negative impact on patients' quality of life[9]. Furthermore, individuals with IBS and comorbidities tend to show poorer responses to conventional therapies, including antispasmodics, antidiarrheals, or laxatives[9]. This underscores the need for multimodal and comprehensive treatment strategies, incorporating psychological interventions (such as cognitive-behavioral therapy or hypnotherapy)[10], lifestyle modifications, and, in some cases, psychotropic medications—referred to here as *neuromodulators*[5].

The management of IBS should adopt an interdisciplinary, comprehensive, and individualized approach that addresses both intestinal symptoms and comorbid conditions. Identifying these associated disorders not only improves differential diagnosis but also optimizes treatment, reduces chronicity, and enhances patient prognosis. Recognizing the high prevalence of comorbidities in IBS presents a significant clinical challenge but also an opportunity to shift the care paradigm from a purely digestive focus to a broader, more effective biopsychosocial approach[11,12].

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