

The Greatly Underestimated Role of Psychogastroenterology in Supporting Patients with Gastrointestinal Disorders

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Submitted: 23 September 2025 Accepted: 27 September 2025 Published: 03 October 2025

doi <https://doi.org/10.63620/MKIJGP.2025.1005>

Citation: Agnoletti, M. (2025). The Greatly Underestimated Role of Psychogastroenterology in Supporting Patients with Gastrointestinal Disorders. *Int. J. Gastroenterol. Proact*, 1(4), 01-03.

Abstract

It is well established that the management of psychological stress influences gastrointestinal functioning. However, despite this robust scientific knowledge, which identifies the specific role of the psycho-gastroenterologist, such insights remain largely unapplied in clinical practice, significantly limiting the effectiveness of care for patients with gastrointestinal disorders (Disorders of Gut–Brain Interaction, DGBI). This article highlights the underestimated importance of psychogastroenterology within the biopsychosocial paradigm, emphasizing the need to recognize the Microbiota-Gut-Brain-Mind axis as a more comprehensive framework. Psycho-gastroenterology offers a scientific, interdisciplinary approach that enables collaboration overall between psychologists and gastroenterologists, ultimately improving patient outcomes.

Keywords: Psychogastroenterology, Stress, Gut-Brain-Mind Axis, Biopsychosocial Model, Gastrointestinal Disorders, DGBI, Integrated Care.

Main Text

It has already been widely scientifically demonstrated that managing psychological stress influence's gastrointestinal function, but this valuable knowledge, which identifies the specific role of the psycho-gastroenterologist, continues to remain largely unapplied at the clinical level, thus significantly limiting the effectiveness of the support provided to patients with gastrointestinal disorders. Let's see what the reasons are for this apparently provocative statement.

The heterogeneous set of gastrointestinal disorders (currently called Disorders of Gut–Brain Interaction, DGBI) affects approximately 40% of the world population irritable bowel syndrome (IBS) alone is estimated to be around 14.1% according to a recent meta-analysis involving 52 countries based on the Rome III/IV criteria [1,2]. The complex chronic dynamics of DGBI can only be understood within the bio-psycho-social paradigm [3] and in particular by what should be called the Microbiota-Gut-Brain-Mind (MGBM) axis and not simply the Microbiota-Gut-Brain axis or, in an even more reductionistic way, the Gut-Brain axis [4].

No other known paradigm is sufficiently detailed to describe

the complexity of GBD. Applying reductionist paradigms to the bio-psycho-social approach is potentially dangerous, especially from a clinical perspective. Attempting to address chronic GBD issues with solely biological/molecular "solutions" is a form of reductionism (unfortunately widespread even at the clinical level) that denies scientific evidence, especially regarding the psychological and social impact of GBD issues. The biopsychosocial model proposed by the World Health Organization [5] and the medical model proposed by Engel [6] remind us of the conceptual framework within which the etiopathological dynamics of DGBI should be explored. In the biopsychosocial paradigm, the role of psychological stress management has a significant impact on DGBI interactions. Indeed, scientific evidence has now accumulated identifying the main mechanisms through which mental events cause gastrointestinal alterations, significantly impacting the symptoms of DGBI patients [7-11].

The Microbiota-Gut-Brain-Mind axis is characterized by bidirectional dynamics, meaning that communication between the mind and the microbiota occurs both top-down and bottom-up, and is multimodal because it occurs through communication that can be both neural and endocrine [7-12]. Since these interactions involve both cells with human DNA and cells with non-human

DNA (microbiota), when referring to the concept of well-being and health, it would be more appropriate to speak of a holobiotic organism [13,14]. From an academic perspective, therefore, it is almost obvious that psychological factors impact gastrointestinal dynamics, but what is the clinical impact of this evidence?

Like other conditions that affect millions of people, such as thyroid disorders, DGBI issues present the paradox that, despite the already robust scientific literature demonstrating the fundamental role of psychological stress management on gastrointestinal issues, the clinical impact of this knowledge remains scarce, if not almost nonexistent [14]. Regarding the application of scientific evidence supporting the role of psychological and social stress in gastrointestinal dynamics, virtually all professionals in the field (physicians, gastroenterologists, psychologists, nutritional biologists, etc.) essentially behave as if this knowledge were not already available. In fact, gastroenterologists, physicians specializing in the diagnosis and treatment of gastrointestinal tract diseases, despite being aware of the available literature demonstrating that psychological stress influences gastrointestinal dynamics, lack specific expertise in psychological stress, and do not include this important aspect in their protocols nor refer patients to the appropriate healthcare professional: a psychologist. Furthermore, due to a training culture that characterizes biomedical professions, which generally overestimates the influence of biological/molecular factors over psychological and social ones, nearly all physicians/endocrinologists and nutritional biologists greatly underestimate the importance of the impact of psychological stress management on DGBI issues. The underestimation of the role of psychological stress on DGBI dynamics is promoted primarily by psychologists, and this is, at least in part, paradoxical.

Psychologists' lack of awareness of the implications of psychological stress on DGBI problems, however, has different reasons than their biomedical colleagues. Psychologists, despite coming from a culture that accepts the existence of causal relationships between psychosocial and biological factors, are generally unaware of the recent scientific literature specifically linking psychological stress and DGBI problems, and thus greatly underestimate the role of their profession in supporting this widespread type of patient. It must be said that an important exception to this paradoxical effect of psychologists' underestimation of DGBI issues is represented by psychoanalysis and psychosomatics. Although both fields of psychology have historically been important for the attempt to integrate mental and physical aspects, they are both very fragile from a methodological point of view, relying more on anecdotal observation and theoretical speculation than on rigorous experimental scientific methodology.

Lack of solid scientific literature makes both psychoanalysis and psychosomatics particularly self-referential, with poor communication with biomedical colleagues and difficult-to-measure clinical efficacy studies. Psychologists, therefore, despite being the most qualified and institutionally recognized healthcare professionals for the management of psychological stress, currently generally greatly underestimate the role of mechanisms now well-identified in the scientific literature that demonstrate how psychological stress impacts the quality of life and health of DGBI patients.

Psycho-gastroenterology is an interdisciplinary scientific discipline that studies and addresses the relationship between psychological processes and gastrointestinal functioning, within the biopsychosocial model. Born from the convergence of biomedical and psychological research since the 1970s, it represents the attempt to scientifically identify the mechanisms through which the mind and the gastrointestinal system communicate with each other. Currently, very few psychologists apply the psycho-gastroenterology model (try a simple web search in English and you'll find only a few pioneering exceptions in the United States and Australia), despite this model being the only one to offer solid scientific basis and the valuable opportunity to easily communicate with colleagues in the biomedical field (gastroenterologists, biologist-nutritionists, etc.) because it always refers to the common Microbiota-Gut-Brain-Mind axis and therefore allows for integrated and more clinically effective interventions in supporting DGBI patients.

Just as a gastroenterologist is the most suitable specialist to address the physiological aspects of DGBI problems, a psycho-gastroenterologist is the most suitable healthcare professional to improve stress management in DGBI patients. Clearly, the clinical treatment of the physiological aspects of DGBI problems requires specific professional skills on the part of the gastroenterologist. Similarly, psychological stress management interventions in the context of DGBI, performed by a psychologist, also require specific professional skills, based on currently available scientific knowledge, to avoid generic, non-personalized, and potentially dangerous interventions.

It should be remembered that in Italy, the psychologist is the only recognized and legally regulated healthcare professional who addresses psychological health and well-being using the methods and tools of psychological sciences. Therefore, they are the most competent professionals in managing psychological stress [16]. In summary, scientific research already clearly indicates the importance of the contribution of psychologists, and therefore of psycho-gastroenterologists, in providing effective support to patients with gastrointestinal disorders and in carrying out effective prevention activities. However, this role remains under-recognized and under-valued, even within the professional profession itself, due to limited educational and cultural awareness.

The hope is that psychologists will soon be able to fill this training gap, thus being able to reach and concretely help millions of people who would significantly benefit from a specific psychological intervention, naturally combined with the already existing, and equally important, biomedical support.

Author Contributions

The author is solely responsible for the entire content of the manuscript.

Conflict of Interest Statement

The author declares no conflicts of interest.

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