Irritable bowel syndrome: an integrated explanatory model for clinical practice

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Abstract

Background Although irritable bowel syndrome (IBS) is a symptom-based diagnosis, clinicians' management of and communication about the disorder is often hampered by an unclear conceptual understanding of the nature of the problem. We aimed to elucidate an integrated explanatory model (EM) for IBS from the existing literature for pragmatic use in the clinical setting. Methods Systematic and exploratory literature searches were performed in PubMed to identify publications on IBS and EMs. Key Results The searches did not identify a single, integrated EM for IBS. However, three main hypotheses were elucidated that could provide components with which to develop an IBS EM: (i) altered peripheral regulation of gut function (including sensory and secretory mechanisms); (ii) altered brain–gut signaling (including visceral hypersensitivity); and (iii) psychological distress. Genetic polymorphisms and epigenetic changes may, to some degree, underlie the etiology and pathophysiology of IBS and could increase the susceptibility to developing the disorder. The three model components also fit into one integrated explanation for abdominal symptoms and changes in stool habit. Additionally, IBS may share a common pathophysiological mechanism with other associated functional syndromes. Conclusions & Inferences It was possible to elucidate an integrated, three-component EM as a basis for clinicians to conceptualize the nature of IBS, with the potential to contribute to better diagnosis and management, and dialog with sufferers.

Keywords explanations, explanatory models, irritable bowel syndrome, mechanisms.

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