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Addressing the Mind, Body, and Spirit in a Gastrointestinal Practice for Inflammatory Bowel Disease Patients

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The past decade has witnessed a growing emphasis on the importance and clinical relevance of incorporating a multidisciplinary approach to address patients' priorities and desires that includes specific attention to mind–body approaches in the treatment of many gastrointestinal (GI) illnesses. This trend may be attributed to mounting empiric evidence indicating that the disease course and even etiology of many functional and organic GI illnesses is best understood by a combination of genetic, physical, physiological, and psychological factors. There also has been increased recognition of the pervasive, psychosocial impact that chronic GI illness may have on the patient's life and disease course, as well as the benefits of addressing such issues in management of these disorders.^{1,2} It is thus paradoxical that gastroenterology practices in teaching hospitals and private practices rarely incorporate interventions to address the interaction of mind and body in the treatment of their patients. However, many GI patients often seek to either supplement or even substitute their standard care with alternative approaches. This desire results from dissatisfaction with standard therapies, negative side effects of conventional medication, and/or an attempt to avoid medication and a desire for a greater sense of control over one's health.³ Simply put, patients seem to prefer a holistic approach, one that considers not merely the body's specific physical symptoms, but the illness experience in its entirety: mind, body, and spirit.

Stress is one of the most important environmental factors that impacts mind, body, and spirit. Although the specific mechanisms by which stress affects the gut are largely unknown, evidence suggests that stress affects GI function through several mechanisms, including activation of the brain-gut axis and modulation of hormonal and neuroimmune pathways.^{4–6} For example, the stress hormone corticotrophin-releasing factor is involved in the endocrine, behavior, and visceral responses to stress including stress-induced changes in GI motility and intestinal mucosal barrier function. Stress reactivates and exacerbates colonic inflammation in experimental colitis and increases mucosal inflammatory markers in inactive ulcerative colitis (UC) patients by activating mucosal mast cells and disrupting mucosal barrier integrity.^{4,6} Perceived stress predicts mucosal abnormalities among UC patients,⁷ an effect that may be caused by stress-induced exacerbation of mucosal inflammatory cascades. These studies provide substantial evidence that stress influences the GI tract and bolsters support for the impact of the long-lasting effects of stress on GI

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Conflicts of interest

The authors disclose no conflicts.

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function that could impact the disease course in illnesses such as inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS).

Despite compelling experimental data that stress and the mind impact wide ranges of GI functioning and the inflammatory cascade, we still await future studies to see if stress management and holistic therapeutic approaches could indeed impact the disease course of GI illnesses. However, recent studies have suggested that these interventions positively impact patients' quality of life by at least improving their coping and associated symptoms of depression and anxiety, which are extremely common in patients with IBD and IBS.² Indeed, mounting evidence suggests that psychotherapy can have a significant impact on both psychological and clinical outcomes measures. Psychotherapy for IBD patients typically has incorporated relaxation and stress management techniques, and selected interventions are based on various theoretic orientations, including psychoanalysis and psychodynamic theory, cognitive behavioral theory, and supportive psychotherapy.²

Most clinicians are keenly aware that coping with a chronic illness, such as IBD and IBS, can be extremely challenging, with a major negative impact on the patient's quality of life. These patients worry regularly about the numerous uncertainties associated with their disease, such as when the next flare will occur, whether they can control their urge to defecate during social events or at work, whether current medications will cease to be effective, and whether surgery will become necessary. These concerns also impact their interactions with family members, children, coworkers, and friends, resulting in increased difficulties in coping with their disease and contributing to mood disturbances. It is not surprising that IBD patients suffer from symptoms of depression and anxiety as high as 60% to 80% during flare-ups and even up to 35% during remission.⁸ Interventions helping these patients to confront these difficulties by either exploring their feelings through psychotherapy, or by increasing their awareness of feelings through techniques such as Mindfulness-Based Stress Reduction (MBSR), could improve their illness coping, and this should lead to improved quality of life. Indeed, our recent, unpublished data of 50 patients with ulcerative colitis showed that mindfulness (as measured by the Mindfulness Attention and Awareness Scale⁹) showed a significant positive correlation with quality of life ($r_s = 0.49$; $P < .01$).

Further studies are needed to show whether these techniques indeed would impact these patients' lives positively. Nonetheless, the following 2 vignettes show how IBD-specific individual and group psychotherapy as well as MBSR potentially could be useful in the management of a subset of IBD patients; thus practicing gastroenterologists should identify patients with poor coping and comorbid anxiety/depression who could benefit from such interventions.

Vignette 1

Charlie, a 19-year-old college student, was diagnosed with Crohn's disease at age 13. He was in remission for several years before experiencing a flare-up at the end of his college freshman year. In clinic, he showed severe anxiety regarding the recent Crohn's symptoms, leading him to question his capacity to return to college in the fall. At the suggestion of his gastroenterologist, and despite his prior negative experience with a psychologist with no knowledge of health psychology and IBD, Charlie agreed to see the psychologist from the GI clinic. After the initial psychiatric evaluation, the GI psychologist, with expertise in treating patients with chronic GI illnesses, demonstrated diaphragmatic breathing, a relaxation method for coping with anxiety and Crohn's-related symptoms (ie, abdominal pain). The GI psychologist provided the rationale for this technique, and recommended that Charlie practice daily. During subsequent sessions, it became clear that unresolved feelings

such as anger and sadness regarding his illness continued to interfere in his life, such as dating and college activities, and interactions with family and friends. After 12 therapy sessions and participation in the IBD support group, facilitated by the GI psychologist and focused on IBD-specific education, Charlie showed more adaptive coping with his illness as well as his fears and anger. It is plausible that providing this IBD-centered supportive service at the GI clinic, rather than referring him to a general psychologist, increased his acceptability, sense of empowerment, and positive outcome.

Vignette 2

Becky, a 30-year-old mother of 3, enrolled in the 8-week MBSR course hoping to alleviate the UC-related stress she was battling. She had been suffering from UC for years, and regarded her flare-ups as both humiliating and debilitating. Her flares left her feeling helpless and unable to cope with the stress of the chronic disease. Typical to an MBSR course, the class met weekly and required participants to listen to a CD of relaxation exercises daily. Becky entered the second class tearfully mourning the body she once had. As the course moved on to more meditation instruction, participants worked on training their mind to return to the present moment each time it wandered. As a neutral observer of her mind, Becky began to notice the shame and judgment that were vying for her attention. At first she felt overtaken by these thoughts, the shame at her body not functioning as she would like, and the guilt and judgment in not being able to mother and function as she wished.

As the MBSR instructor suggested, instead of “buying into” the judgment narrative, Becky challenged her mind to return to her momentary sensory experience, moment by moment. Through this work, Becky discovered a renewed ease with her body “just as it is.” By the final class, Becky shared a sense of empowerment. Although her physical symptoms remained objectively unchanged, Becky’s sense of focus and calm allowed her to feel a greater sense of peace and ease with her illness. Ultimately, Becky reported feeling more connected to herself and her family, as well as to what she termed “the order of things.”

A holistic approach toward treatment also necessitates, when applicable, a consideration of the role of religion and spirituality within the patient’s life. Indeed, involvement in a religious community typically provides ongoing social support for patients with chronic illness, and one that might contribute to more adaptive coping. We recently explored whether religiosity, as measured by the Duke University Religion Index of Religiosity,¹⁰ is associated with quality of life, among a subset of 24 patients with inactive UC (Table 1). Our results did not indicate any positive correlation. Interestingly, the data highlighted the importance that religion plays in 13 of 24 of their lives, as indicated by their endorsement of the statement that “religious beliefs were behind [their] whole approach toward life.” Gastroenterologists therefore may want to consider whether religion and spirituality are relevant to their patients, particularly because it may affect patients’ perceptions regarding their illness and their compliance with medical management.

Conclusions

Despite growing evidence for its potential importance in the optimal management of chronic illnesses and patients’ desires, the integration of a holistic multidisciplinary approach toward GI illnesses, one that incorporates mind, body, and spirit, continues to be rare in both academic and private practices. We acknowledge several obstacles to routine implementation of this approach in our practice, including the physician’s limited knowledge and familiarity with empirically based interventions, an inherent bias toward nonmedically based treatments, increasingly limited time to interact with our patients during

their office visit, and concerns regarding financial feasibility. However, there are compelling experimental data, epidemiologic studies, and clinical observations that support the potential impact of incorporating interventions to deal with mind and body on GI symptoms, disease course, and quality of life of our patients with these chronic and socially isolating diseases. We believe that providing these services in a GI practice could be cost effective in the long run by potentially decreasing use of our resources and time, such as fewer office visits, emergency room visits, and telephone calls. Further randomized studies are needed to determine the impact of these interventions on patients' quality of life and disease course, and their financial impact on our practices. In the meantime, we still can incorporate aspects of mind–body interventions into our management of patients with IBD and IBS.

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Abbreviations used in this paper

GI	gastrointestinal
IBD	inflammatory bowel disease
IBS	irritable bowel syndrome
MBSR	Mindfulness-Based Stress Reduction
UC	ulcerative colitis

Table 1

Correlation of Religion (DUREL) With IBD Symptoms and Quality of Life (IBDQ)

	IBDQ	IBDQ-emotion	IBDQ-systemic	IBDQ-social	IBDQ-bowel
DUREL subscale 1	$P = .872$ $r = -0.035$	$P = .645$ $r = -0.991$	$P = .729$ $r = -0.075$	$P = .520$ $r = -0.138$	$P = .612$ $r = 0.109$
DUREL subscale 2	$P = .823$ $r = 0.048$	$P = .845$ $r = 0.042$	$P = .251$ $r = -0.244$	$P = .250$ $r = -0.244$	$P = .522$ $r = 0.137$
DUREL subscale 3	$P = .995$ $r = -0.001$	$P = .723$ $r = 0.076$	$P = .189$ $r = -0.280$	$P = .152$ $r = -0.302$	$P = .988$ $r = -0.003$

NOTE. Subscale 1 (question 1): frequency of religious attendance; subscale 2 (question 2): frequency of private religious activity; subscale 3 (questions 3-5): intrinsic religiosity. Spearman correlation, $n = 24$.