

TRANSLATIONAL MEDICINE: BENCH TO BEDSIDE

Coping Flexibility, GI Symptoms, and Functional GI Disorders: How Translational Behavioral Medicine Research Can Inform GI Practice

Christopher Radziwon, PhD¹ and Jeffrey M. Lackner, PsyD¹

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Irritable bowel syndrome (IBS) is a common, oftentimes disabling gastrointestinal (GI) disorder affecting some 40 million individuals. For many people with IBS, pharmacological and dietary options fall short of therapeutic objectives at least for the full range of GI symptoms. When patients fail to respond, even the most technically skilled gastroenterologist has little to offer but to encourage the patient with IBS to cope with it. While few would argue with such advice, just what coping means is hard to define.

What Is Coping?

Coping refers to the specific thoughts and behaviors that people use to master, tolerate, reduce, or minimize stressful events. One way that researchers categorize coping strategies is in terms of their function.¹ Problem-focused strategies, such as taking direct action or confronting a problem head on, are designed to resolve or fix a stressor. For example, a 57-year-old female who suddenly experiences bouts of abdominal pain and finds blood in her stool relies on problem-solving strategies when she calls to schedule an appointment with her gastroenterologist and follow up colonoscopy. Emotion-focused strategies, on the other hand, are efforts to manage the distress of stressful or potentially stressful events. Until she receives the results of the colonoscopy, there is little the patient can do but to manage distress caused by uncertainty by adopting emotion-focused strategies. Taking a walk, relaxing, talking to friends, controlling “what if?” thoughts are examples of emotion-focused strategies.

Research indicates that people use both types of strategies to deal with stressful events² because both are useful in specific situations.³ Problem-focused coping strategies work better for controllable problems such as work-related problems and family-related problems, while emotion-focused coping works best in less controllable situations, such as, certain kinds of physical health problems. This means that that effective coping depends on matching ones control over life events to the proper coping strategy. Calibrating coping strategies to control beliefs is called “goodness of fit”¹ and its value has been supported in numerous studies with patients with different medical problems including those undergoing hemodialysis,⁴ women undergoing *in vitro* fertilization,⁵ multiple sclerosis,⁶ HIV,⁷ and congestive heart failure.⁸ These data indicate that effective coping requires a degree of mental flexibility that allows one to toggle back and forth between emotion-focused and problem-focused coping strategies depending on how changeable a problem is in a given situation.

A study published in a top tier behavioral science journal, *Healthy Psychology*, shows that coping flexibility may be particularly important for patients with functional gastrointestinal disorders.⁹ The study⁹ was conducted by a research team led by Cecilia Cheng of Honk Kong University of Science and Technology. They examined the typical coping strategies functional GI disorder (FGID) patients relied on for managing different stressors that varied in terms of controllability. The authors found that FGID patients have an inflexible coping style that is geared toward fixing a problem regardless of its controllability. For those medical professionals who struggle with managing complex IBS patients, the study sheds light on the idiosyncratic way that FGID patients cope with stress and offers clues to improving medical outcomes that depend on improving patients’ coping efforts.

Study Details

Participants included 120 adults (50% female) who formed three balanced groups. The first group consisted of participants with IBS or functional dyspepsia. The second group included arthritis patients, while the third group included healthy controls.

¹Behavioral Medicine Clinic, Department of Medicine, University at Buffalo School of Medicine, SUNY, Buffalo, New York, USA
Correspondence: JM Lackner, PsyD, Behavioral Medicine Clinic, Department of Medicine, University at Buffalo School of Medicine, SUNY, ECMC, 462 Grider Street, Buffalo, New York 14215, USA. E-mail: lackner@buffalo.edu

Individuals in all groups were matched on sociodemographic variables. Semi-structured interviews were administered to examine type of coping responses (emotion-focused vs problem focused) subjects used to deal with for uncontrollable and controllable stressors.

Study Findings

The authors found that the healthy controls and arthritis patients had similar coping styles for dealing with stress. They relied on a combination of emotion- and problem-focused coping strategies and matched their use of coping strategy to the controllability of the problem (Figure 1). As the figure below shows, when faced with controllable problems, these individuals took direct action using problem-focused responses much as the “goodness of fit” hypothesis predicts. With uncontrollable problems, they used emotion-focused strategies, such as, acceptance, relaxation, or seeking support from others. FGIDs patients, on the other hand, showed a more rigid coping style. Regardless of whether the problem was uncontrollable or controllable they favored action-oriented strategies, attempting to problem-solve or otherwise confront the problems head on in an effort to solve them. The coping skills they used less frequently—emotion-focused strategies—were associated with less severe physical symptoms.

At the time this study was published conventional wisdom held that effective coping required patients to improve their ability to brainstorm solutions for problems.¹⁰ The thinking was that FGID patients had problem solving deficits that made it difficult for them to generate solutions to problems. But the Cheng *et al.* data suggest that the problem for FGID patients was not an inability to solve problems. After all, problems that got under their skin were uncontrollable and therefore largely insolvable. Teaching patients to brainstorm for solutions to insolvable problems ran the risk of reinforcing an overreliance of problem focused strategies which in turn can magnify stress, disrupt brain-gut interactions, and aggravate GI symptoms. To us, this was a prescription for stress not its relief. More important than knowing how to solve a problem was the ability to accurately gauge just how much control they had over a problem and respond accordingly. This meant teaching patients to expand their coping skills by learning emotion-focused coping strategies.

To this end, FGID patients needed to learn how to appraise accurately the controllability of a stressor and then deploying the best coping strategy (Figure 2). What type of coping strategy patients picked should flow from how much control the patient realistically has over the event not their personal preference for fixing a problem. We call this flexible problem solving and it is a core component of the behavioral treatment program we have developed at the University at Buffalo and featured in 3 NIH grants over the past 15 years.^{11,12} Our approach teaches flexible coping skills for tackling both controllable and uncontrollable problems. Through didactic instruction and structured exercises, patients learn to break down a problem, assess its controllability, and adopt

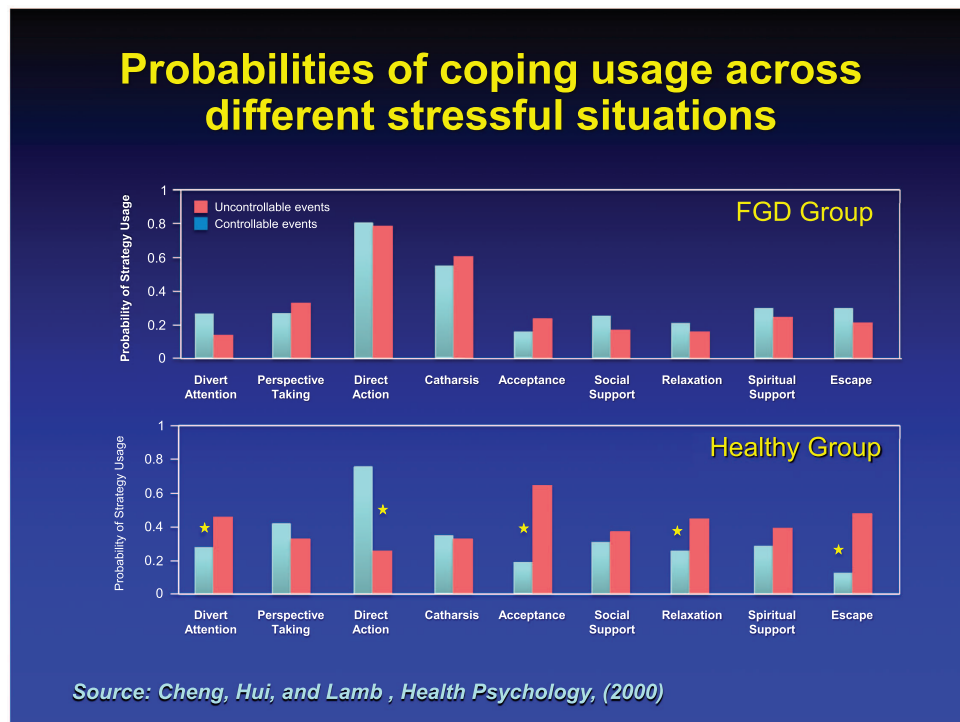


Figure 1 Probabilities of coping usage for different types of stressors.

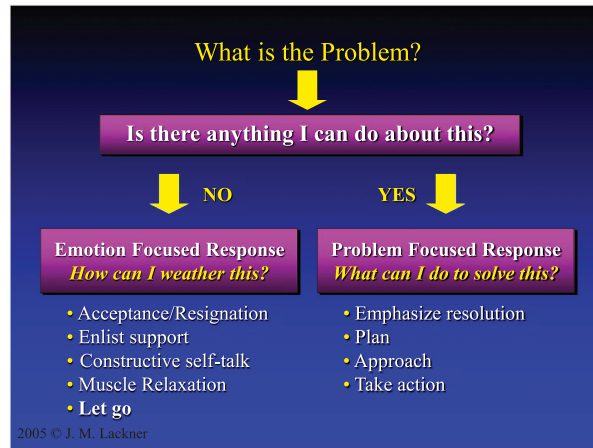


Figure 2 Flexible Problem Solving Model.¹⁵

the best coping strategy across different situations. For uncontrollable problems, patients learn concrete strategies geared toward managing the emotional unpleasantness of the situation (e.g., cultivating acceptance, “letting go”, worry control, muscle relaxation, emotional disclosure, and enlisting social support). For controllable stressors, patients are encouraged to do what comes easy to them: employ strategies for solving or “fixing” the situation itself. This approach is captured in the above figure.

Practical Implications for The Clinical Gastroenterologist

The “goodness of fit” principle can serve as a useful decision making model for GEs managing complex IBS patients. From this perspective, many behaviors that frustrate GEs (e.g., requests for further diagnostic testing, reassurance seeking, “doctor shopping”, complaining, and so on) can be understood as a product of a rigid coping response geared toward fixing a problem. Well-intentioned physicians who often feel a need to “do something” risk reinforcing action-oriented coping efforts. The use of a problem-focused coping response for a problem that is either uncontrollable or less controllable than desired is a prescription for patient dissatisfaction, distress, worry, and health care inefficiency. A more useful strategy is to recognize the largely uncontrollable nature of residual symptoms and strengthen patients’ use of emotion-focused coping strategies. This can be facilitated through the use of improved communication skills.¹³ A coping skills approach that highlights the importance of matching control beliefs to coping efforts is what we call a “top down” approach. It has inherent advantages over a “bottom up” approach that is driven by patient or physician preferences for fixing a problem. Because a bottom up approach circumvents the critical question of whether a situation is changeable it is inherently problematic when the patient confronts stressors for which there is no satisfactory solution. (Anecdotally, of the different self-management skills we teach patients, flexible problem solving is a strategy patients they enrolled in our clinical trials find particularly useful.)

The Cheng study, like others in the stress literature, emphasizes that coping is a dynamic process not defined by the situation *per se* but the relationship between the person and the situation. This means there is no such thing as a patient who is a good or bad copier. Stressful situations are not static events, nor do individuals respond uniformly to all stressful events. The effectiveness of coping effort depends on the how a person appraises aspects of a stressful event such as its controllability. For patients to cope effectively with the daily burden of IBS, they need to adopt the best strategy among a menu of options tailored to the demands of the situation. Problem focused strategies work best for changeable stressors; emotion focused strategy work best for unchangeable ones. While emotion-focused strategies do not fix a problem, they are most effective in containing the “emotional fallout” of a stressor which may explain why they are associated with less severe physical symptoms in FGID patients.^{9,14} By linking coping strategies to their control over stressful events, patients are relieved of the burden of trying to solve insolvable problems and free to tackle problems that are truly under their control. In short, they learn the paradoxical lesson that the way to gain control over a problem is to accept its uncontrollability and deploy the best available coping strategy. This is a lesson that can not only benefit patients but gastroenterologists who recognize that the best solution for intractable GI symptoms does not always come in a bottle but by supporting patients efforts to learn to manage unresolved symptoms on their own.⁹

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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