The Global Approach To Pediatric Functional Gastrointestinal Disorders

By: Arlene Caplan, Ph.D. and Andrée Rasquin, M.D., Division of Gastroenterology and Nutrition, Hôpital Ste-Justine, Departments of Psychology and Pediatrics, University of Montreal, Montreal, Quebec

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Introduction

In a previous article, we discussed the current state of research and knowledge pertaining to pediatric functional gastrointestinal disorders (FGIDs) that can be applied to the understanding and treatment of these disorders in children and adolescents (see IFFGD fact sheet #824–What's New in Pediatric Functional Gastrointestinal Disorders). In this article, we will describe our own "Global Approach" to the treatment of pediatric FGIDs, which can be adapted for use by any multidisciplinary team dedicated to helping these youngsters and their families cope with these disorders.

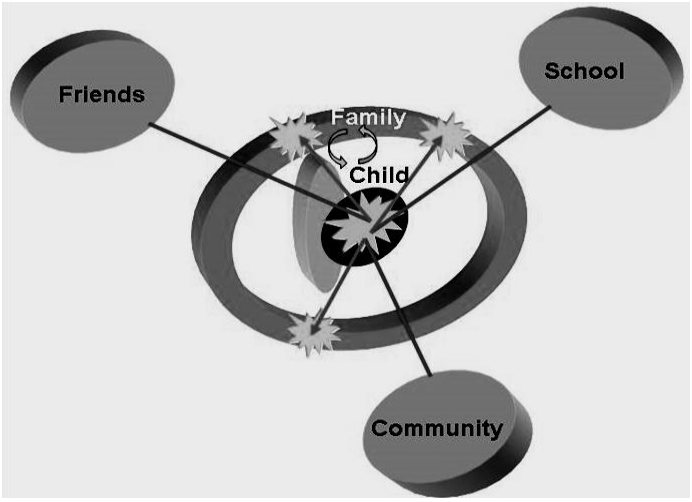
What Is The Global Approach?

The "Global Approach" refers to both a theoretical framework and a clinical approach based on the Biopsychosocial Model of illness proposed by G.L. Engel in the late 1970s. This holistic model recognizes the contribution of psychological and social factors, and how they interact with biological processes, in the genesis and evolution of disease and illness. The Biopsychosocial Model is now accepted as the gold standard for understanding and treating FGIDs in adults, and its application to pediatric practice has been proposed primarily for children with recurrent abdominal pain. Pediatricians are by necessity involved with the entire family and they have long been using a biopsychosocial approach to childhood disease, however not necessarily for functional disorders. During the past several years, we have been developing the Global Approach with our patients, putting the Biopsychosocial Model into clinical practice with children and adolescents suffering from FGIDs. We are now using this approach in a more systematic manner with our young patients and their families.

How Does The Biopsychosocial Model Apply To Pediatric FGIDs?

In pediatric practice, the Biopsychosocial Model can be represented as a complex, interacting system with the child at its center (see Figure 1). The child, along with his genetic predispositions and unique biological and psychological characteristics, is surrounded by his family and caregivers, as well as by three external social subsystems: school, friends, and community. Each of these subsystems constitutes a potential source of *stress* in the child's life, and problems coming from any of them can result in an imbalance in the system as a whole. A child's susceptibility to developing FGID symptoms can result from physical and/or psychological stress interacting with a vulnerable gastrointestinal tract, due either to visceral hypersensitivity, dysmotility, inflammation, or other biological factors. An imbalance, caused by stress anywhere in the child's biopsychosocial system, can also trigger or worsen his or her symptoms.

Figure 1: Schematic Representation of Sources of Stress Affecting Children With FGIDs



Within the biopsychosocial model, the child is inextricably linked to his family. When a child experiences stress due to academic difficulties, conflicts with friends, or problems encountered in community activities such as team sports or social groups, the entire family's equilibrium can be affected. Similarly, when other family members, including parents, siblings, grandparents or other relatives experience stressful events, the child is bound to be affected as well. Because the Global Approach takes into account the interdependence of the child and his or her family, the family system, as well as the individual child, must be included in the treatment plan.

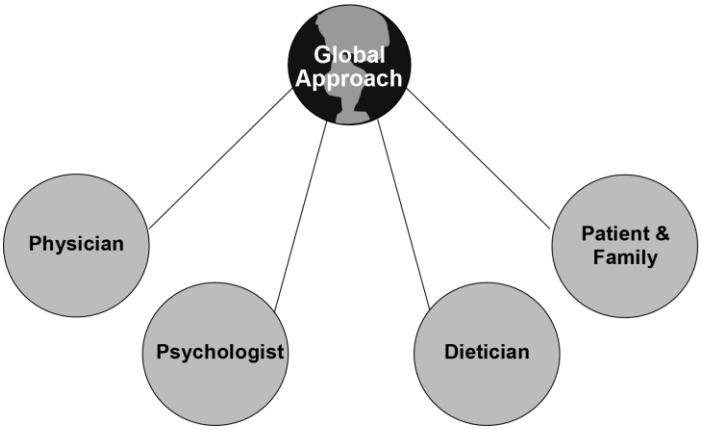
Who Is Involved In The Global Approach?

In our pediatric gastroenterology clinic at Ste-Justine Hospital, where more severe cases of FGIDs are often seen, the Global Approach involves *team work.* It is a coordinated therapeutic effort that focuses on rehabilitating the child from impaired to usual functioning. The Global Approach represents a multidisciplinary collaboration between three

members of the gastroenterology treatment team (the physician, psychologist, and dietician) and the patient and her family. We will focus on the contributions of each team member, illustrating the partnership each forms with the child and the family.

Figure 2

Partners In The Global Approach



The Contribution of the Physician

During the initial visit, the physician spends a considerable amount of time with the patient and his or her parents, exploring the various factors that may contribute to and compound the child's disorder. Next, a careful medical examination is done, paying particular attention to the presence of any signs of organic disease. Any laboratory tests deemed necessary are also performed. Only when the results of the clinical evaluation permit us to rule out organic disease can a positive diagnosis of a FGID be made, based on the pediatric Rome II criteria. However, informing the patient and family of the diagnosis is not sufficient; they also need to be provided with a clear explanation of the Biopsychosocial Model and how it relates to the child's particular symptoms. The manner in which the physician explains the patient's FGID is of utmost importance and often determines whether or not the family will become a partner in the team treatment effort. More specifically, patients and parents must understand and accept the idea that the goal of treatment is rehabilitation rather than cure. To help them understand, the physician provides a great deal of detail about the pathophysiology of FGIDs, including what is now known about visceral hypersensitivity, brain-gut interactions, information from PET scans, etc. In our experience, this information is generally well understood and appreciated by both children and parents, and it seems to strengthen their confidence in the diagnosis and the treatment we are proposing.

In the case of IBS, Functional Dyspepsia, and Functional Abdominal Pain, we use a Severity Index proposed by Douglas Drossman, which although not yet validated in children, helps us organize our treatment plan. According to this index, as the child's disorder becomes more severe, symptoms become more frequent, the association between symptoms and physiological alterations decreases, psychological dysfunction increases, and social difficulties (which in children often include school absenteeism) are more frequent. It has been found that patients with more severe symptoms are more likely to deny the link between stress and their symptoms. These observations are important, because they help us define our specific treatment plan, which varies somewhat according to the severity of the child's FGID.

Treating Children with Mild Symptoms – For children and adolescents with mild symptoms, information about the pathophysiology of FGIDs, reassurance from the physician, and dietary modifications are generally sufficient to improve symptoms. When the physician explains the disorder and diagnosis well, patients and parents are generally better able to acknowledge the role of psychological stress in the child's disorder. In order to help children recognize the link between psychological factors (their thoughts, feelings, and behavior) and their symptoms, the physician often asks them to keep a diary of their symptoms and associated emotions. This also gives the child the message that she plays an important part in identifying stress factors that might trigger or worsen her symptoms.

Treating Children with Moderate Symptoms – In the case of a moderate disorder, more psychological difficulties are often present and symptoms generally lead to social dysfunction. In these cases, the physician is more likely to prescribe symptom-targeted medication, such as anticholinergics (anti-cramp medication). At the same time, the physician strongly recommends that the child consult the team's psychologist, to whom they are required to bring their Symptom Diary. It is in these circumstances that the message delivered by the physician to patients and parents makes all the difference in shaping their attitude toward the psychological consultation. Many adolescents initially deny that they are stressed at all and are similarly unaware of the link between stress and symptoms, however subtle. An important step in the treatment process is to help our young patients understand that factors that trigger stress often go unnoticed. The physician helps them understand that a stress-related message can reach the brain and lead to a physiological reaction (stomach pain, nausea), even though the person may be totally unaware of that message.

Treating Children with Severe Symptoms – In cases of severe disorder, the psychologist helps the physician decide

whether the child presents with psychopathology that requires a consultation to a psychiatrist for psychopharmacological treatment or other more intensive psychiatric therapy. Children with severe FGIDs, mostly adolescents, often consult in our clinic after several months of missing school. Many have a particularly difficult time accepting the referral to a psychologist, and, unless given some pain medication, will not be willing to take the initial steps toward rehabilitation. In these cases, the physician attempts to negotiate with adolescents, promising to accompany them during rehabilitation, without promising a cure. The physician explains the characteristics, side effects, and benefits of anti-depressants, and how they can be used in conjunction with nutritional and psychological counseling. The physician encourages the patient to consult the other members of the treatment team, because dietary and psychological support will continue to be helpful even after anti-depressants are discontinued. We emphasize to our patients that anti-depressants, or any other medications, are not going to provide a magical cure, and that taking care of their diet and emotions is just as important.

The Contribution of the Dietician

Dietary recommendations are also useful in our clinical approach with children who have FGIDs and are tailored to the type of presenting disorder. In general, consulting the dietician helps parents a great deal because it takes the onus of supervising the child's eating habits off of them. The child works with the dietician to become responsible for controlling or modifying her food intake. Indeed, dietary concerns and restrictions are often a source of conflict between parents and children, especially around the dining table, and disrespecting food limitations is a common way for children to express anger and defiance. When another adult works with the child to help develop self-control and to understand how to better take care of herself, food issues are less apt to cause parent-child battles.

On the other hand, clinicians must accept certain realities regarding adolescents' eating habits and family situations related to food preparation and meal sharing. It is more the rule than the exception for adolescents to skip breakfast, snack on junk foods with friends during the school day, and go out for fast (and cheap) food with the group at night. For adolescents with FGIDs, this pattern will most likely worsen their symptoms. Similarly, when parents are unavailable to prepare healthful meals and to share mealtime with their family in a relaxed manner, youngsters have little choice but to eat in a rushed and nutritionally compromised manner. In our "high stress" society, we often forget that meals shared with family and friends provide not only an opportunity to offer nutritious and tasty foods, but also the pleasant and calm ambiance that helps children manage stress at the same time as facilitating healthy digestion and healthy relationships.

The Contribution of the Psychologist

The psychologist's role is threefold: 1) to evaluate the child and his family; 2) make specific treatment recommendations; 3) conduct psychological interventions in parallel with medical and nutritional consultations.

During the evaluation period, the psychologist's primary goal is to identify sources of stress in the various domains of the child's life: school, family life, peers, the larger community, and the self (the child's inner life). Our application of the Biopsychosocial Model conceptualizes the development of digestive symptoms as a *dynamic process*, whereby psychological stress on the child from any of these five sources reverberates within the family system. Stress due to problems anywhere within the family system has a 'rebound' effect, which impacts on the child and potentially exacerbates symptoms. It is therefore important to assess the entire family's awareness of how psychological factors trigger or maintain the child's disorder, as well as the contribution of family factors to stress the child may be experiencing.

The Family Evaluation – Early in the psychological evaluation, the child is interviewed in the presence of all members of his family. This enables the psychologist to observe family interactions and form hypotheses about the dynamics and relationships that may contribute to the onset and maintenance of the child's gastrointestinal symptoms. Particular attention is paid to how family members may model and/or reinforce the child's symptoms. Parents who themselves have difficulty coping with medical problems often identify with children who show signs of illness, and consequently they may "go easy" on their children, for example by exempting them from attending school or performing household chores. Although motivated by caring and empathy, this parental attitude paradoxically tends to reinforce children for being dysfunctional and is likely to prolong or intensify, rather than alleviate, symptoms. Family members often encourage "illness behavior" in children with FGIDs without knowing it by offering simple treats or privileges to compensate for their child's pain or discomfort. Parents are usually unaware that the preferential treatment they show their child suffering from an FGID is resented by other children in the family, who themselves have difficulty understanding their brother or sister's symptoms and think they are "faking" in order to get attention.

How other family members cope with problems in their own lives is also of interest to the psychologist, since children learn coping strategies to a large extent from their environment. Parents or siblings who tend to become

highly anxious, overwhelmed, or helpless when faced with adversity in their lives are unknowingly modeling ineffective coping strategies that may be adopted by younger members of the family. This is particularly true for parents, whose behavior has a particularly strong impact on children, especially younger ones. In our experience, children with FGIDs tend to lack effective strategies for coping with problems as well as with their symptoms. They tend instead to be rather passive and dependent on their parents to alleviate their pain or discomfort. Unfortunately, when parents are themselves anxious, worried, or frustrated about the child's disorder, the suffering child rarely receives the reassurance from parents that he or she is seeking.

During the family evaluation, equal attention is paid to family conflicts or difficulties that may contribute to emotional stress for the child suffering from an FGID. These may be negative interactions between parents and children, notably during adolescence, between siblings who are excessively competitive or jealous of one another, or between parents who are experiencing marital discord. Children are very sensitive to signs of marital conflict, and despite what they may say outwardly, they can be profoundly saddened or worried about what is going on between their parents. During the family interview, the psychologist remains attentive to communication patterns that may reflect conflict or stress of a more subtle nature and helps the family discuss stressful events shared by the family (such as the illness or death of a grandparent or other relative, financial hardship, parental depression, or other traumatic events). These events are often associated with the development or exacerbation of the child's symptoms. Parents are frequently surprised to learn the extent to which emotional stress they are experiencing in their personal or professional life can be "absorbed" by their children and affect their gastrointestinal symptoms. Sensitizing parents to the impact their problems have on their children's health is often sufficient motivation for them to make changes in their lives or seek help to resolve their issues.

The family interview is also an opportunity to explore how a particular child's FGID "functions" within the family system. Children's symptoms often appear to have a "hidden agenda," which is to mask other family problems from coming to the surface, thereby maintaining the family's "equilibrium." For example, the child's abdominal pain may be a "rallying point" for parents who are considering separation or divorce. In this case, the child's FGID is functioning to keep his or her parents together. Another example is when a mother returns to the work force after a long period of being at home. For families that have difficulty negotiating this major change in family life, the child's symptoms may function to abort or delay that process. Again, this maintains the family's equilibrium and delays what children and parents alike may anticipate to be an emotionally painful separation.

It is important to realize that children are often unable or unwilling to express their anger, sadness, or fears related to family events, particularly when they have little control over them, and that the associated emotional stress is often operating at an unconscious level. The family interview offers all members the opportunity to discuss experiences and transitions that the entire family is going through, and allows children's emotions to be expressed and acknowledged, even if they cannot change their situations. For children, the mere expression of previously "hidden" feelings is often a first step to the alleviation of stress, anxiety, and gastrointestinal symptoms.

Interviewing Children with FGIDs – In addition to the family, the psychologist always interviews children alone during the evaluation stage. This allows sources of stress outside the family to be identified. Children often feel more comfortable discussing problems of a personal nature with the psychologist alone rather than with their family, particularly during adolescence. Such problems may be related to academic performance, relationships with peers, or other personal issues such as body image, lack of confidence, self-esteem problems, or issues related to sexuality. Interviewing children alone also allows them to discuss their feelings toward family members more freely, without worrying about hurting their parents' feelings or offending siblings.

During the initial interview, the psychologist assesses the child's awareness of the role that stress and emotions play in the disorder. Children who are already making connections between their thoughts, feelings, or events they have experienced and their symptoms are at a decided advantage in our clinical approach, and are likely to be good partners in treatment. It is also important for the psychologist to evaluate the child's capacity for psychological insight, because this is an important factor in selecting the appropriate type of psychotherapy (psychodynamic, behavioral, cognitive, etc.). Children who are more "psychologically minded" tend to understand the Biopsychosocial Model more easily, and are generally enthusiastic and cooperative with treatment.

Psychological Treatment – Depending upon the information obtained during the evaluation period, psychological interventions may involve any of several subsystems: the entire family, the couple, parents or siblings individually, or the child alone. The clinical approach is eclectic, incorporating family systems, psychodynamic, and cognitive-behavioral techniques as appropriate. The approach with children followed individually focuses on stress awareness and management, with an emphasis on the development of coping strategies to manage both symptoms and stress in general. An underlying principle of our approach is that the child is encouraged to take responsibility for his own symptoms and rehabilitation, and is regarded as an active participant in the treatment effort. A *collaborative alliance* between the psychologist and child is therefore critical to the success of treatment. Psychologists working with children with

FGIDs must take the necessary time to establish a strong "therapeutic alliance" and encourage them to express any disappointment, frustration, and skepticism that they may feel at the outset.

When working with children on an individual basis, the psychologist makes effective use of a Symptom Diary to record patterns of symptom presentation; events, thoughts, feelings and behaviors associated with symptoms (triggers and responses); and strategies the child is currently using to cope with symptoms. The child is asked to complete the Symptom Diary for two weeks at the beginning of treatment, and is told that the diary acts like a "window" to help see what is going on in her head when she gets her symptoms. The psychologist explains that this diary will help identify the thoughts, feelings, behaviors and events associated with symptoms, and what can be changed so that she reacts differently when she gets them. The psychologist's goal is ultimately to increase the child's awareness of the connection between psychological events and symptoms, to help the child cope with his symptoms, and to transfer responsibility for rehabilitation from parents to the child.

How Effective Is The Global Approach?

Combining medical, dietary, and psychological support, the Global Approach that we have described offers a comprehensive and proactive rehabilitation program for children suffering from FGIDs. Although we have not yet studied its efficacy in a systematic manner, our impression is that our approach is indeed beneficial for both children and their families. In our clinical experience, children's symptoms typically become less frequent and intense, parents and children become less distressed about their symptoms, and symptoms interfere considerably less with the child's and the family's daily functioning. Using the Global Approach, children gradually develop new and more effective ways of *coping* with stress and with any symptoms that may endure. It is rewarding to see how children become more energetic, optimistic, and back to their "old selves," but with the added maturity of being able to manage their systems and their own problems more independently. Thus, the Global Approach offers children with FGIDs and their families not only physical rehabilitation, but also the opportunity for transformation at many levels.

IFFGD
537 Long Point Road, Suite 101
Mt Pleasant, SC 29464