

Mindfulness for Pediatric Health Conditions



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“Breath in, breath out... Breath in, breath out,” Rebecca tells herself over and over again. Rebecca sits nervously on a hospital bed, eyes clamped shut and head turned as far away as possible from the nurse who is about to insert a needle into her right arm to collect a blood sample. Rebecca has lost count of the number of times that she has been poked, prodded, and probed over the last several months. Her frequent medical procedures have heightened her fears and increased her sense of hopelessness. Rebecca tries to use the “coping skills” that her doctors have recommended to “help with the pain,” “help with the nausea,” and “help with the anxiety.” “Breath in, breath out. Go to your happy place. Distract yourself.” But Rebecca’s fears persist, and she has a nagging dread that she’ll never be “normal” again.

Rebecca feels a sharp sting and a tugging sensation, and then, the blood draw is over. Rebecca relaxes back onto the bed, and she finally opens her eyes. “Now that was easy, wasn’t it!” the nurse says, smiling down at her. Rebecca can’t help but roll her eyes and place her hands on her chemotherapy-induced bald head. Rebecca is filled with a dissatisfaction that she can’t put into words, an overwhelming desire to have things go back to normal. She would give anything to escape this place, escape her body, and escape her illness. She closes her eyes yet again, fighting back the tears that have begun to roll out of the corners of her eyes. “Breath in, breath out,” she says to herself, for what feels like the thousandth time. “Breath in, breath out.”

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Health Challenges and Psychological Adjustment

Unsurprisingly, children and adolescents like Rebecca who are faced with significant health challenges often have difficulty with psychological adjustment. Psychological consequences of medical illness commonly create problems with academic, social, and family functioning. These challenges can be particularly difficult when children encounter chronic illnesses, which have lengthy or indefinite duration. For example, consider Oliver's experience. Oliver is a 16-year-old male with recently diagnosed type 1 diabetes. Oliver often feels embarrassed to check his blood sugar in front of his friends, so he frequently skips checking his blood sugar while he is at school. Failing to check his blood sugar makes it difficult for Oliver to know how much insulin he needs, which results in his blood sugar running too high. High blood sugar makes it difficult for Oliver to concentrate in class, and he frequently visits the school nurse's office or calls his mother to ask her to pick him up early from school. Because of his frequent absences, Oliver is falling behind in school, and his grades are suffering. Additionally, because Oliver is not managing his illness well, he seems to always be arguing with his mother about his diabetes and feels like his mother is always "nagging" him to be more responsible in managing his illness. If you or your child has a chronic medical illness, Oliver's story likely sounds very familiar. Oliver's challenges in his social, academic, and familial functioning are common experiences across youth with chronic medical illness.

Fortunately, recent research suggests that mindfulness can be an effective strategy for helping youths with health conditions to accept, make room for, and manage their chronic medical illness. Mindfulness practice is an excellent strategy for coping with the psychological stress accompanying illness in children and adolescence. As detailed in previous chapters in this book, mindfulness practice includes focus on present experience, nonjudgment of thoughts and feelings, and pursuing valued activities despite suffering. These principles hold particular promise for children and adolescents who deal with daily health challenges, including chronic pain, headaches, stomach complaints, or other chronic conditions.

Why Mindfulness for Pediatric Health Problems?

Many children faced with significant health concerns approach illness from a traditional biomedical perspective. This perspective implies that illness arises from some specific physiological problem (e.g., something has gone wrong in your body) and that medical intervention (e.g., doing something to change processes in the body) is what is needed to reverse the condition. Biomedical perspectives also tend to separate the body from the brain, with little acknowledgment for the influence of psychological processes on disease functioning or attention to the effects of physical illness on psychological health. When children and their families approach disease from this perspective, they often pursue medical remedies for illness with persistent

belief that medicine can provide solutions to their problems. However, many chronic health conditions cannot be treated effectively using traditional biomedical interventions, and parents eventually become discouraged by the limited effectiveness of drug or surgical treatments. When medical “cures” become increasingly unlikely and the prospect of living with an illness (vs. curing an illness) becomes the most likely outcome, children and parents often search for methods to cope with disease rather than continue to seek less effective medical remedies.

How Is Mindfulness Different for Children?

Mindfulness for children differs from mindfulness with adults in that the mindfulness for youth is often focused on specific practices that can be used as coping strategies, rather than focusing on mindfulness as a “state of being.” For example, a simple mindfulness coping strategy for children and adolescents is to teach them mindful awareness of their breath. This can be done in a variety of ways (e.g., blowing bubbles, blowing on a pinwheel, putting a stuffed animal on their stomach and “taking the animal for a ride”), but the basic premise is to have the child take all of their attention and focus it on the breath. This type of breathing differs from the breathing we saw demonstrated by Rebecca at the beginning of the chapter. Simply “taking deep breaths” does not embody the spirit of mindfulness; you and I are both capable of deep breathing while continuing to engage in anxious thinking. Mindful breathing—that is, focusing all of one’s attention on the breath—is the key characteristic that separates mindful breathing from simple deep breathing.

One mindfulness exercise that has been helpful for young children to practice mindful breathing is to have them imagine that a spider is sitting in their mind, tangled up with all of their “scary thoughts.” The child is gently encouraged to imagine that the spider is slowly lowering down on his web (the child is instructed to keep their attention on the spider) until the spider is just behind the child’s nose. The child is asked to imagine how the spider gently sways back and forth behind the child’s nose as he breaths in and out. The child is instructed to focus on the air going in and out of the nose. The child is encouraged to imagine the spider moving toward his mouth, where the child is told to imagine that the spider sways even harder as he breathes out of his mouth. The spider then lowers itself on its web until it reaches the chest and stomach, where the child is instructed to “take the spider on a ride” while the chest/stomach moves up and down. The child is told that if the spider ever tries to “climb back up his web” and get tangled in the scary thoughts again, he is to gently coax the spider to lower himself back down on his web.

Outside of mindful breathing, mindfulness strategies such as progressive muscle relaxation (having the child tense and relax all major muscle groups, focusing on the state of tension and relaxation in each muscle group), grounding (e.g., having the child press his/her feet firmly into the floor, focusing on how they feel connected to the present moment), mindful noticing (e.g., noticing things in the room they have never seen before, noticing any smells in the room, seeing how many sounds they

can identify), and mindful activities (e.g., brushing their teeth mindfully, taking slow steps, and noticing how the body feels during the processes of walking) can be useful. Similar to adults, the goal of engaging in these mindfulness practices is that, over time, they can generalize this mindful awareness outside of the active mindfulness practice and use that awareness to navigate through life.

Interestingly, teaching mindfulness to children is often easier than teaching mindfulness to adults. Adults often have set ideas of how a mindfulness meditation practice should go or have already established set of beliefs or ways of thinking that may not be compatible with mindful meditation. However, children are typically more open to new experiences and are still developing their patterns of thoughts, feelings, and behaviors. Habits that are formed in childhood are often maintained into adulthood, so childhood is a perfect time to begin to teach mindfulness meditation. However, it is not unusual for children to be resistant to mindfulness meditation practice initially (as children are not always the biggest fans of sitting still and “doing nothing”), but we have been surprised by how quickly children have taken to the practice.

Examples of Mindfulness Practice for Specific Illnesses

As discussed previously, mindfulness practice in children and adolescents often starts by using mindfulness as a way to cope with distressing thoughts or physical sensations (e.g., pain). This is especially true in using mindfulness in children with specific illnesses. Children with chronic medical illnesses face dozens (if not hundreds) of challenging moments throughout the day in which they are required to respond to an illness-specific stressor. The goal of teaching mindfulness is to give the child a skill that they can rely on at any given moment to help meet these challenges as they naturally occur throughout the day. A large component of mindfulness interventions for children with specific illnesses is acceptance, or accepting the parts of the illness that cannot change, and focusing instead on what the child does have direct control over. Mindful acceptance involves noticing distressing thoughts or experience (e.g., “I notice that my headache is back again”), avoiding judgment about the experience (e.g., “This pain is so awful, I can’t go to school”), and moving in the direction of valued action (e.g., going to school despite pain). In the following sections, we will highlight how mindfulness and acceptance strategies can be applied for a number of common pediatric illnesses.

Gastrointestinal Conditions

Gastrointestinal conditions (such as ulcerative colitis, Crohn’s disease, irritable bowel syndrome, and celiac disease) can often interfere with daily functioning and can be socially stigmatizing. Consider Sandy, a 14-year-old girl with Crohn’s

disease, as an example. Sandy recently received a colostomy surgery where her colon was diverted to a small opening in her abdominal wall. Sandy now has to wear a colostomy bag every day to catch her fecal matter. Sandy has no control over when or where she has a bowel movement, and there are occasions when the bag will have a small leak and will smell. Sandy is mortified when she realizes that her bag is beginning to leak during the middle of a class, and she will go from bathroom to bathroom until she can find an unoccupied bathroom to empty her bag and clean herself up. Sandy frequently comments that she “hates” her colostomy bag and wishes she could make all of her stomach issues disappear.

Similar to many chronic medical illnesses, focusing on acceptance is a large part of coping with gastrointestinal conditions. Because these conditions can be so interfering, children often spend a great deal of time and effort wishing things could be different. Mindfulness practice for these children frequently involves having them map out what about their life they can't control (e.g., their disease, when they have diarrhea, when they throw up) and what they can control (e.g., what they eat, what sports they participate in, how they respond to disease-related stressors). Encouraging children to explore what type of life they want to live and brainstorm with them how to achieve this, even with their disease present, is a helpful strategy for engendering purposeful living. Interestingly, because stress is often a trigger for gastrointestinal-related symptoms, we have found that when children and adolescents stop struggling with trying to change their disease, their symptoms actually decrease.

Mindfulness meditation is also very useful for children with gastrointestinal issues, as it can be used as a grounding exercise during moments of physical discomfort or embarrassment. For example, if the child is experiencing stomach cramping in the middle of a class, they can bring their attention to their breathing for a few minutes to help them cope with their pain. Mindfulness can also be used to help the child from getting caught up in unhelpful thinking patterns; if a child notices that they are obsessing whether another student heard them throwing up in the bathroom, they can use mindfulness to bring their attention back to the present moment.

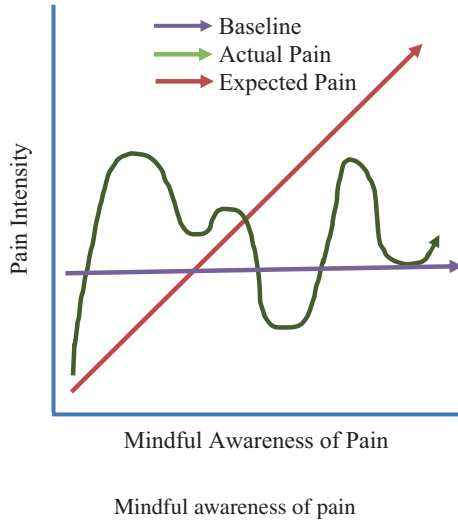
Pain

“Wait. You’re telling me that you want me to actually focus on my pain? But I deal with my pain all day long! Why would I want to spend *more* time thinking about it?” This type of response to mindfulness and acceptance is very typical in children and adolescents. Chronic pain has become such a pervasive part of their life that it feels absurd to consider giving the pain even more of the limelight. However, mindfulness and acceptance around pain can teach the child a great deal about the nature of pain.

For example, one mindfulness activity that we conduct with children to teach them the nature of pain is to hold an ice cube for 5 min. As you are probably aware, holding an ice cube for that long is incredibly uncomfortable! While the child sits with the ice cube in hand, we encourage the child to notice the physical sensations in the hand, asking them to mentally label the sensations (e.g., sharp, stabbing, cold, burning, itching). We also ask them to notice how the discomfort alternates in intensity, with sometimes just being an annoyance and other times being nearly overwhelming. Finally, we ask the child to pay attention to what their brain is telling them, such as telling them that the activity is dangerous or that they need to drop the ice cube.

Following the mindfulness practice, we spend time processing with the child what it was like to have that acute physical discomfort. Children frequently note that they were surprised by how the ice cube did not hurt them the entire time but peaked at various points throughout the exercise. We often can relate this back to their chronic pain, noting how by paying attention to the pain the child can find moments where the pain is manageable and tolerable. We also spend time processing the many thoughts that arose during the ice cube mindfulness experience. Very frequently, the child reports that they worried that they would have permanent damage (such as frostbite) and that they would have to deal with the pain forever. They also talk frequently about having the thought that they need to drop the ice cube. We can then discuss how our brain's automatic response to pain is to try to escape the pain and pull in examples of how the child has tried to escape the chronic pain in their life (e.g., medications, skipping activities). More than anything, this exercise teaches the child that they can be fully present with intense physical discomfort for five whole minutes, and by being fully present, they were able to directly challenge thoughts and notice moments where the pain was not as intense. We then start to work with the child on becoming more aware of their daily pains.

This graph helps illustrate how mindfulness practices can teach about the nature of pain. Youth typically experience what they consider their baseline level of pain (purple line). When youth first think about focusing on their pain, they believe that the pain will only intensify if they give more attention to it (red line). However, by noticing the pain, they are generally able to see how the pain rises and falls over time (green line)—they may even be able to appreciate the moments when their pain is lower.



Obesity

Mindfulness is also utilized frequently within children and adolescents with obesity. Because eating foods in large quantities often occurs automatically, or without thought, for youth with overweight or obesity, we aim to bring awareness back to eating patterns and to body cues for hunger and fullness. For example, Sarah (an obese teenager) often eats potato chips while watching television, and she does not realize how much she has eaten until she notices that the bag is empty. We worked with Sarah on becoming more mindful of her motivations for eating and her eating behavior. Specifically, we helped Sarah to pay attention to every bite she consumed while eating her meals. This meant that we encouraged her to never eat while watching television, doing homework, playing on her phone, or even talking to others. We coached Sarah on how to really notice her eating experience; we prompted her to visually examine every bite of food, to smell each bite of food, and to let each bite of food sit on her tongue for a moment before slowly chewing and swallowing. Once Sarah placed the food in her mouth, we encouraged her to lower her spoon or fork until she had completely swallowed her food, to better enable her to be present with her eating experience. We also worked with Sarah to notice when she began to feel full and to respect her body’s cues by stopping eating when she was no longer hungry.

In addition to mindless eating, adolescents who are overweight or obese often feel embarrassment or shameful about their body and frequently have negative thinking patterns regarding themselves and their weight. We work closely with adolescents on using mindfulness as a way to detangle themselves from these negative thoughts and instead focus on what they have control of in the present moment. For

example, when Tyler (an overweight 14-year-old male) thought about going to the gym, he would immediately begin thinking of how everyone at the gym would quietly make fun of him or secretly judge him for being overweight. These fears were often enough to deter Tyler from going to the gym. Using mindfulness exercises, Tyler was able to attend the gym, and he would frequently focus on his breathing or on his physical exercises as a way to keep his mind from thinking about what others were thinking.

Conclusion

In this chapter, we have illustrated the usefulness of mindfulness for youths with medical/psychological concerns. It is important to emphasize that mindfulness implies that the brain and the body are intricately connected and that using the mind to reduce distress associated with health concerns is an important part of achieving wellness. Mindfulness has particular promise for helping children and adolescents with health concerns because it emphasizes pursuit of values, attention to present experience, avoiding negative judgment about experience, and using the brain to produce responses in the body that reduce distress. Mindfulness is not intended to “get rid” of illness. Rather, it provides tools to help children and adolescents change their relationship to illness and to help them move in the direction of health and thriving.

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