

Headaches in Children and Adolescents: Evidence-Based Guidelines for Optimal Treatment

The Headache Action Plan was developed as a simple tool to guide primary care providers in migraine management, including prevention and abortive therapy as well as recommendations for school and lifestyle.

Jennifer L. Bickel, MD is here to discuss how the Headache Action Plan web application takes medical providers through four sections to help guide the management of migraines and to provide handouts for the family and school.



Featured Speaker:

Jennifer L. Bickel, MD

Jennifer L. Bickel, MD, is a neurologist and medical director of the headache program at Children's Mercy Kansas City in Kansas City, MO. She completed her medical degree and residency in internal medicine at the University of Missouri-Kansas City, Kansas City, MO and a residency in neurology with the University of Kansas Medical Center, Kansas City, KS. As a board-certified headache medicine specialist, she treats children with refractory headaches with comprehensive services including medications, self-regulation training, lifestyle management, procedures, acupuncture and other researched modalities. In addition to seeing patients, Dr. Bickel is a published researcher, political advocate for headache research funding, and an associate professor at University of Missouri - Kansas City where she directs the Medical Neuroscience course for the medical school.

[Learn more about Jennifer L. Bickel, MD](#)

http://www.childrensmercy.org/Clinics_and_Services/Clinics_and_Departments/doc=6863



Transcription:

Dr. Michael Smith (Host): Our topic today is "Headaches in Children and Adolescents: Evidence Based Guidelines for Optimal Treatment". My guest is Dr. Jennifer Bickel. Dr. Bickel is the Medical Director of the Headache Program at Children's Mercy Kansas City. Dr. Bickel, welcome to the show.

Dr. Jennifer Bickel (Guest): Thank you for having me.

Dr. Smith: Well let's just start off with a nice simple question. What is the headache action plan?

Dr. Bickel: The headache action plan is an evidence based tool that we developed to help PCP's to be able to initiate care in their office quickly, effectively without having to rely upon referral to a neurologist as there's often a shortage of child neurologists out there. The headache action plan can help the PCP to

be able to choose what sort of prevention is needed, what board of medicine might be needed and also it provides easy to use guidelines for being able to set up a headache calendar, to be able to write a letter for the school and to be able to give lifestyle recommendations. All with just the click of a button. It then creates a packet for the patient to be able to give to them so they have the education they need to be able to take control of their own headaches. The idea behind this is essentially to be able to empower the PCP's to be able to treat the patients before the downward spiral of headache related disability begins.

Dr. Smith: I'm actually on the site now. Let me go ahead and give the site associated with the plan that's headachereliefguide.com.

Dr. Bickel: Yes.

Dr. Mike: It's a great looking site, Dr. Bickel. I'm looking at it. It looks like it's very easy to navigate, which is important today. Everybody is busy, busy, busy, right? It does make me wonder, so there are other sites out there. Was there something missing from those sites that you wanted to include at the headachreliefguide.com?

Dr. Bickel: You know, I think that there are excellent education sites out there. Originally, we thought about naming the site "pediatric migraine" but then, we realized that nobody Googles "pediatric migraine". What they are looking for is, they are looking for the cause of their headaches, the relief of their headaches and often, the educational sites that we have out there are for more educated individuals. If we really want to be able to reach the people early on and reach everybody at all different reading levels, then we try to develop an interactive site that would be engaging, not just for adolescents, but also for adults—a site in which they would be able to take quizzes and to be able to figure out how protected their brain is from headaches. There are engaging videos in which there's a little bit of humor mixed into it. They learn about how to take care of their headaches. They learn about the path physiology of pain. We tried to make it really actually resemble the website that our adolescents are using now such as Netflix, etc., that have that sort of an interactive feel to it. A little bit different than kind of a website that really is just a text-based website.

Dr. Smith: I do want to mention to the listeners that when you go to the site, the main home page it looks more geared towards the patient but there is a, up to the upper left, is a link for medical providers and I assume that's what would lead into the headache action plan for primary care physicians. Is that correct?

Dr. Bickel: Absolutely. It's also important to point out that for funding reasons, the site is fully operational on a pc, on a Mac, on a laptop. It is not fully operational on a phone or on a tablet. So, if you want to be able to get to the medical provider portal, it's going to have to be on a more traditional computer. So, what the physician would do is go in there, put in their information, don't worry – none of it is saved. The only reason why the doctor has to put in their name is just so later on when the letter is generated to the school, it will automatically populate their name in it to make it easier for them. Then, there's a section in the medical provider portal that can teach them about headaches or they can skip right towards creating the action plan.

Dr. Smith: I went to the site. I actually went in there. I put my name in and I'm in the physician portal

and there's what, to learn more and fill out a new action plan. If a physician goes into that part where they went to fill out an action plan, could you walk us through the steps there?

Dr. Bickel: Absolutely. So, the very first thing is putting in the patient's name and their weight. Because this is for the ages 12 and above, it will automatically boot you out if you put in someone that's 10. There's really just not the evidence in that young of population to provide such clear cut guidelines. The next step, once you've put in the patient's name and weight, is to answer the simple question of, "Is the patient experiencing more than four days of headache a month?" If they're experiencing more than four days of headache a month, then it will give you options to choose from Amitriptyline, Topamax or magnesium for prevention. If they're not experiencing more than four days of headaches a month, then it skips you to the next section of an abortive therapy. So, this doesn't tell the provider exactly what medication to use but it gives them evidence-based guidelines for two or three options and they can choose what's best for them. The next section would be abortive medicines. Just some questions like, "Are over-the-counter medications effective?" If they are, then abortive medicine isn't needed. But, if the over-the-counter medications are not effective then, once again it provides options and advice for what could be considered. Do you need to add an anti-medic? The next section is going to be about lifestyle recommendations. The PCP can just type in a couple with a click of the box, really, for recommendations for drinking more water, getting more exercise and what that will do later on when it comes time to generate the packet, is it will go ahead and have handouts developed for prevention guidelines, for abortive medicine and as well as for those lifestyle recommendations. It then moves on to school. A lot of times if we can just provide some accommodations at school, we can prevent disability. We can prevent the kids from missing full days of school and it allows, just by clicking a couple suggestions, it will automatically formulate a school letter so that all the PCP has to do is sign it and then hand it to the family to take to the school. Finally, it allows the PCP to do a headache calendar--a customized headache calendar if that's how they would like to treat their patients.

Dr. Smith: Dr. Bickel, I kind of went through the process as you were saying it and there is a section that I find interesting here, too, and I like to see this is, the health habits recognizing that there are lifestyle things that the patients can do to improve. I think this is very comprehensive and very nice. How many physicians are using this website--this portal--every month or so?

Dr. Bickel: We've actually only, because we did this as part of a grant that was funded to implement system change in adolescent migraines, we've only targeted it within one local school district. In that school district, what we've been doing is utilizing school nurses to identify kids with headache-related disability when they come to their office for headache complaints and encouraging the kids to go to the website and make an appointment with their PCP. That's one of the key components is that with the limited time that doctors have with their patients that we're encouraging the public to make an appointment specifically with their PCP to get their headaches addressed. We're just now, as a matter of fact, that's why we're talking, is we're just now starting to expand it.

Dr. Smith: Right. It looks really nice. So, that's working through the medical provider page. Let's go back out to the home page and I see there's a section for learning about your headaches, experience, and control. This is obviously for the patient.

Dr. Bickel: Yes. We really try to use the words to allow them to feel empowered to take control of their headaches not just to show up at their PCP's office and expect a cure. The video, I think, is one of the

most important things. It's available in Spanish as well and what it does is, it shows a patient what's going on during a headache and explains why they have headaches. I think that many doctors would be relieved to know that it also says that they should not expect narcotics, they shouldn't expect extensive testing. They should just expect a physical examination, a good history and then, really, so that that way so many of them think that they are all going to need MRI's. What we are trying to do and what we've implemented in our own hospital, is that when they are referred to us, we are asking that they watch the video so that they know what to expect at their appointment. The next section is experience. This idea is essentially that we can't really share pain but this is an experience in which you can build your own migraine, such as maybe the visual auroras or the sound sensitivity or what you might be thinking when you have a migraine and this can be shared on Facebook or Twitter. So, it shows what it's like to have a migraine in a classroom. Then, the next section is control. Once again, trying to empower our patients that it's not just about medication. This section goes through all the lifestyle habits that they need including quizzes on how healthy are they? Are they getting the exercise they need? Are they drinking the water they should be? Our pain psychologist developed all of the videos there that we have there that have the relaxation exercises such as breathing exercises and progressive muscle relaxation. One of my favorite sections is "Prepare" which is seven question true or false section asking the child and their family if they are ready to get headache relief and what this is, is are you ready to see your doctor? Are you prepared with the information that you need in order to get the right treatment? For example, evidence has shown that if a patient is able to describe how headaches affect their life, then they are more likely to get the right treatment from their doctor. So, we all have had those frustrations, right? Of patients that aren't prepared. What we're really trying to do is empower the system, not just through PCP's but also through school nurses and reaching the families directly.

Dr. Smith: The website is headachereliefguide.com. Dr. Bickel, it's laid out wonderfully. It's simple to navigate. The content is easy to understand on both sides of it--the patient and the provider side. Excellent job and I'm very excited for you to see what this site does for people. I think you're definitely on the right track here. I want to thank you also for coming on this show. You are listening to *Transformational Pediatrics* with Children's Mercy Kansas City. For more information you can go to childrensmercy.org. That's childrensmercy.org. I'm Dr. Michael Smith. Have a great day.

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