Learning from Teens to Treat Their Chronic Pain

Adolescent Health & Well-Being

Date Posted:

Apr 05, 2019

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During this year's Teen Health Week, I can't help but feel that we need increased awareness for the effective management of adolescent chronic pain more than ever on a regional and national level. While our national response to the current opioid epidemic might be most directly targeted at adults, ensuring that adolescents receive appropriate treatment for chronic pain can potentially prevent a new group of aging teens from becoming another statistic in the opioid crisis as they enter into adulthood.

As a pediatric rheumatologist who specializes in chronic, non-inflammatory musculoskeletal pain syndromes (amplified musculoskeletal pain syndrome, juvenile fibromyalgia syndrome, complex regional pain syndrome, etc.), I wear both the hat of the clinical researcher and the medical provider. Both of these roles have made it clear to me that opioid medications are not a viable long-term solution for chronic pain.

Chronic Pain Among Teens

Chronic pain is very common in the pediatric population, affecting approximately one-quarter of children and adolescents (1-3). Specifically, researchers have reported prevalence rates of pediatric chronic musculoskeletal pain as high as 40 percent (2, 4). Chronic pain takes an emotional and financial toll on teens and their families as they seek a cause and answer for their pain, which often results in health care overutilization. Furthermore, children with chronic pain tend to have continued chronic pain in adulthood, which is one of the most costly medical conditions in Western society.

For a teenager in pain and a medical provider attempting to treat a teen's pain, prescribing an opioid medication might seem like a viable option. In fact, data demonstrate that the prescribing of opioids for adolescent chronic pain continues to be common. In a research study I conducted for my master's thesis looking at national health care claims data between 2000-2013, our team found that nearly one in five teens labelled as having juvenile fibromyalgia syndrome received and filled a script for an opioid medication, the most common of which were codeine (70 percent), tramadol (20 percent) and oxycodone (14 percent). Interestingly, youth with encounters with mental health or non-pharmacologic services (e.g. chiropractor), were less likely to fill an opioid prescription. In this study, I was surprised to find that the majority of teens did not, however, receive more than one opioid prescription. Why was this?

Why Opioids Aren't a Viable Option

Around the time we were running our analyses, I started asking my patients and their families about their experiences with opioids. Some reported that they received a script but never filled it because they “don’t like medications.” On the other hand, one teen told me that she took the medication and it “knocked her out,” but when she woke back up she still was experiencing the same degree of pain. Others told me they felt nauseous or “loopy” on opioid medications. I realized teenagers living with chronic pain are telling us themselves that opioids are not an effective treatment. Even if they received subsequent prescriptions, they likely wouldn’t bother filling them because they cause uncomfortable side effects, serving as a temporary Band-Aid—not a long-term solution.

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And this is what research has also demonstrated. Opioid prescribing among teens not only has potentially serious side effects, but chronic pain in adolescence is an independent risk factor for opioid misuse in adulthood - even more of a reason to not expose teens with chronic pain to opioids. The bottom line here is there’s inadequate evidence-based medicine to support the use of opioids in the management of pediatric chronic pain. In fact, the Centers for Disease Control and Prevention (CDC) released guidelines in 2016 favoring non-pharmacologic and non-opioid pharmacologic interventions for the management of chronic pain.

Supporting Teens in Their Pain Management

So teens are telling us that opioids don’t work in the management of their chronic pain, but my research shows that we are still prescribing opioids for chronic pain. Why are we seeing this disconnect?

Firstly, chronic pain is complex. An interplay between one’s biological, psychological and social factors likely leads to the development of chronic pain. A complex disease warrants an equally complex treatment approach. The best-supported treatment for adolescent chronic pain (excluding some conditions such as a sickle cell disease, incurable degenerative joint and neurodegenerative disease, etc.) includes a multidisciplinary approach combining exercise and psychological counseling, primarily cognitive behavioral therapy. However, access to these non-pharmacologic approaches is limited and there continues to be a stigma associated with mental health services.

This is further perpetuated by the fact that many teens go undiagnosed for months to years before being directed to the appropriate services. Therefore, acquired mistrust of medical providers can serve as a barrier to effective engagement with these non-pharmacologic medical treatments. And while I could write a blog post itself on each of these, increased support for research in the non-pharmacologic management of pediatric chronic pain, increased education of medical providers regarding the ineffectiveness of opioids in the management of pediatric chronic pain, as well as support from policymakers to increase access to psychological services, physical and occupational therapy, and school reintegration programs will be critical in addressing adolescent chronic pain moving forward.

But perhaps most importantly, my experiences with teens with chronic pain has taught me how imperative it is to incorporate our patients into our research and our treatment approach. Listening and learning from their experiences with chronic pain and promoting healthy lifestyle behaviors to support optimal physical and mental health is key. Valuing and validating teens’ experiences with chronic pain, and empowering them with the tools and resources to effectively manage their own pain is perfectly in line with the mission statement of Teen Health Week: “a global initiative to help teens take charge of their health.”

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