



Rachael Bull has had low back pain since she was diagnosed with rhabdomyosarcoma more than 20 years ago, when she was just 6 years old. The pain started during her treatment.

Now 26, Bull is working on her PhD in biomedical science. She deals with back pain every day. “It’s so constant that it’s almost like background noise at this point,” Bull says. “It’s been so long that I’ve learned to live with it.” [Read more about Rachael](#)

Chronic pain, which is pain that lasts for 3 months or longer, is a problem for many childhood cancer survivors. Until now, researchers did not know how common chronic pain was in childhood cancer survivors.

A Long-Term Follow-Up (LTFU) Study, led by Nicole Alberts, PhD, of Concordia University in Montreal, Quebec, is the first to examine how many childhood cancer survivors deal with chronic pain. The journal *Pain* published study results in 2024.



Yoga and other forms of movement can help manage pain.



Nicole Alberts, PhD

- Researchers found that just over 4 out of 10 (41%) adult survivors of childhood cancer said they had chronic pain.
- The results suggest that childhood cancer survivors experience more pain than people who have not had cancer. About 2 in 10 (20%) of people in the general population report chronic pain.
- Researchers believe that cancer therapy, which can cause pain during treatment, may lead to chronic pain after treatment is done. Certain chemotherapy drugs, radiation, and procedures such as surgeries, bone marrow tests, and lumbar punctures may lead to chronic pain.

It is estimated that kids without cancer experience about 6 painful procedures or events per day when they are hospitalized, Alberts says. Given the nature of childhood cancer treatments, it is likely that kids in treatment for cancer have even more painful episodes each day.

Past studies of children without cancer have shown that pain that is not managed well can lead to chronic pain that persists long after a painful event.

“Good pain management is important for all kids, such as when kids go get their vaccinations,” Alberts says. “Kids on treatment are exposed to that type of pain and worse daily. It’s reasonable to suspect they’re not getting perfect pain management in all those instances — which can have major short and long-term consequences.”

Chronic pain may also be caused by treatment-related conditions that develop later. For example, chronic lung, digestive, and neurological problems in survivors were linked with a higher risk of developing chronic pain.

Pain management strategies

Physical, emotional, and social factors affect how much pain a person may feel. People experience pain differently, so pain management methods vary. It may involve more than one type of therapy. The overall goal of an individual management plan is to reduce pain and improve your day-to-day function.

Bull has had lower back pain since she was a child. She has tried [many different approaches to manage it](#). Some have helped, and some have not.



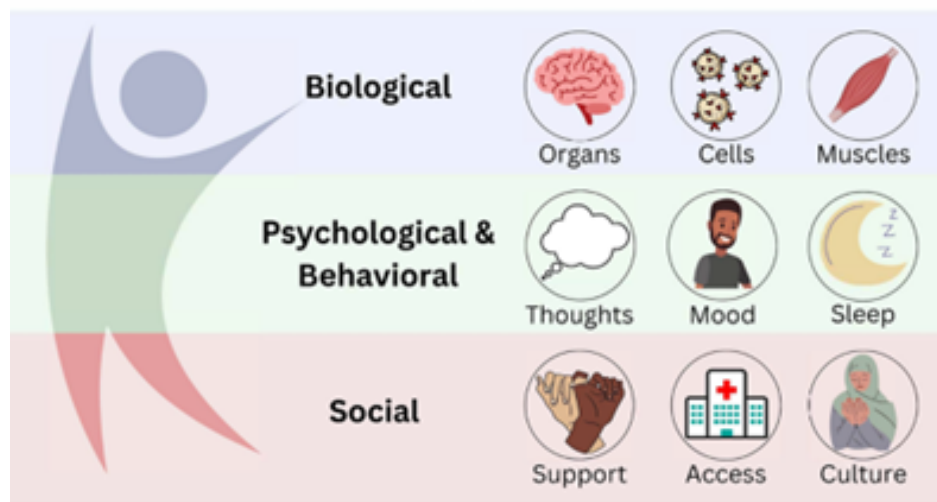
Biopsychosocial Model of Pain



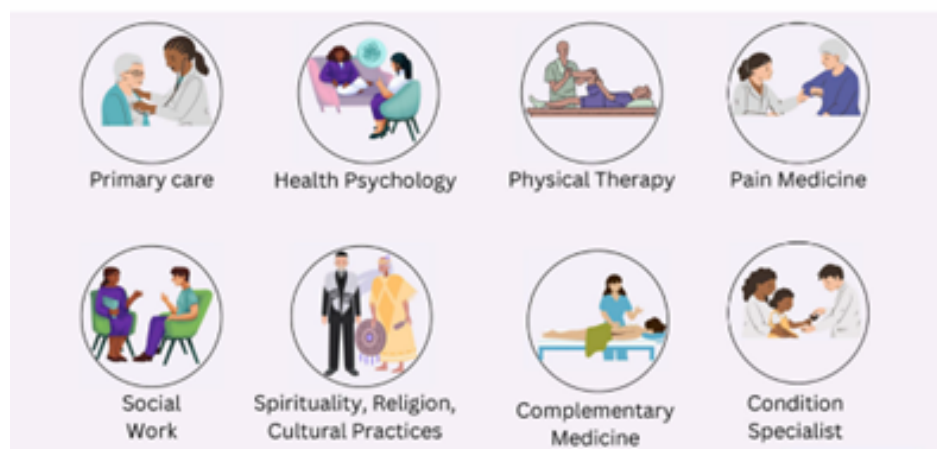
Pain is not just a physical experience.

Factors or changes in the body (*biological*), the mind (*psychological*), and a person's experiences with others and their environmental conditions (*social*), all contribute to one's experience of pain.

The biopsychosocial factors of pain are all linked, and can impact each other in a cycle. Some examples are:



Because pain is a biopsychosocial experience, pain treatment can address a person's biological, psychological, and social needs. For example:



Source:
NIH Pain Consortium



Because she sits at a computer several hours a day, Bull tries to get up at least once an hour to stretch her back. For her, pain management involves the right combination of movement and rest, she says.

"It's this balance of not sitting too long because your back is sore, but not walking for too long because then your back is sore," Bull says. "Somewhere in the middle, I can kind of make it work." Bull says that doing yoga regularly has been helpful for her. [Massage](#) can also relieve pain, but its effects are short-lived. Heat is another method that works sometimes. Bull also has migraines and peripheral neuropathy. For migraines, mindfulness exercises work in some situations.

"Mindfulness and deep breathing work mainly at night when I wake up and feel like I've been hit in the head," Bull says. "It can sometimes help me get back to sleep." Alberts highlights more strategies that can be effective. These methods include cognitive behavioral therapy ([see related article](#)), relaxation, and [self-hypnosis](#), which can allow your mind to achieve a state of deep relaxation.

Factors that affect pain

Pain is complex and unique to each person. Alberts' study found that many survivors with chronic pain also have raised levels of depression, anxiety, and fear of cancer recurrence. Alberts says more research is needed to find out why childhood cancer patients experience chronic pain.

How to find care for pain management

If you have chronic pain, talk to your primary care provider. Be clear about your symptoms and needs. Your provider may not always ask you about your pain.

"Pain sometimes gets pushed to the bottom of the list even when it impacts your life the most," Alberts says. "Chronic pain is sometimes an invisible problem that is not always obvious to a physician. If you have pain, bring it up."

Your primary care provider can help you put together a pain management plan and team of providers to help meet your specific goals.

"There is a huge focus on getting people back into their lives," Alberts says. "If you are experiencing anxiety or low mood, there are ways we can help. If you have sleep problems, there are ways to help with those. If fatigue is a problem, care providers can help with that. It often takes a multipronged approach where we see that improving one or a couple of areas such as sleep or anxiety, leads to big improvements in pain and functioning."

[LTFU Update newsletter](#)