

BEYOND OPIOIDS

Reimagining Pain Management

As a teenager, **Andrea Furlan** suffered severe menstrual cramps. “Nothing worked for my pain, so I had to miss a lot of school and other activities,” she recalls. Those early experiences helped shape her future in medicine.

Today, Furlan (PhD ’06) is a professor of physical and rehabilitation medicine in the Department of Medicine at the Temerty Faculty of Medicine. She’s part of a growing movement of clinicians and researchers reimagining how pain is understood — and how it might be treated differently. Driven by a shared mission, they’re laying the foundation for more personalized, patient-centred pain care.

ONE SIZE DOESN'T FIT ALL

“We use a fairly broad-stroke approach to treating pain, but not all pain is the same,” says **Rachel Tyndale** (MSc ’88 & PhD ’91), a senior scientist at the Centre for Addiction and Mental Health (CAMH), and a professor of psychiatry, and pharmacology and toxicology at Temerty Medicine.

She envisions a future in which treatment is tailored to an individual’s biology. “We’re at the very early stages of creating treatments paired to each type of pain and knowing when they’re going to work for different people.”

For now, researchers are making the most of the drugs that they do have to treat pain more safely and effectively.

“What we often do in pain management is repurpose drugs like antidepressants or anti-seizure medications,” says **Karim Ladha**, the Evelyn Bateman Recipe Chair in Ambulatory Anesthesia and Women’s Health at Women’s College Hospital.

Ketamine is one such example. Originally approved as a general anesthetic, low doses have since shown promise in treating chronic pain conditions and treatment-resistant depression.

SEARCHING FOR ALTERNATIVES

Ladha’s patients and their evolving attitudes toward pain medicine shape his research. “People today are very hesitant to take opioids,” says Ladha, a clinician-scientist. “Patients really want an alternative, and we’re trying to find one for them.”

In the search for non-opioid alternatives, Ladha and colleagues are leading clinical studies to better understand the effects of cannabis on chronic pain. Their goal: to identify which patients are most likely to benefit and which cannabis compounds offer the most effective pain relief.

Ladha is also leading a new randomized clinical trial to examine whether psilocybin, the active ingredient in magic mushrooms, can alleviate chronic neuropathic pain, a debilitating condition characterized by constant shooting, burning or stabbing sensations.

Even though some of these drugs have been used for a long time, Ladha stresses the importance of rigorous research to evaluate safety and effectiveness. The spectre of the opioid epidemic — and the deceptive marketing that led to it — looms large.

“When you look at the marketing around opioids, people consistently said it was safe. And when you listen to people speak about cannabis or psychedelics now, they are using some of the same language,” says Ladha, who is also an associate professor in Temerty Medicine’s Department of Anesthesiology and Pain Medicine.

“We want to be very cautious not to make those same mistakes again.”