

Doctor Speaks From Experience About Addiction

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Dr. Jason Z. W. Powers speaks during an educational event on addiction, *Breaking the Silence*, at Alamo Heights Middle School, Monday, Oct. 28, 2013.

For decades, the notion that addiction as a disease has been an accepted fact among medical circles and much of the general public.

Unlike in eras past, alcoholism and other forms of substance abuse are no longer viewed by many as stemming from weak will, moral degeneracy or just plain bad character.

But what does it really mean to say that those caught in the grip of alcohol, cocaine or other drugs of abuse suffer from a disease? Doesn't personal choice play a role?

In the past 20 years, researchers in neuroscience have uncovered the brain mechanisms that underlie addiction — discoveries that are slowly transforming the field of substance abuse research and treatment.

That was the topic of a talk last week at Alamo Heights Junior School by Dr. Jason Z.W. Powers, director of [treatment centers in Houston](#) and author of “When the Servant Becomes the Master,” which lays out the new science and what it means for those suffering from addiction.

“There is still so much misunderstanding and stigma around addiction,” Powers told a crowd of almost 400 in the school's auditorium.

As a recovering addict, he speaks with knowledge that partly springs from personal experience. Powers described ending up in rehab, where he worried patients would no longer seek his services as a physician. He had learned little about addiction in medical school, where only about 1 percent of the curricula focuses on a problem that affects some 10 percent of the public, he said.

Similar to outdated ideas about schizophrenia, another brain disease, the symptoms of addiction manifest as “bad behavior,” nurturing a misperception that it springs from moral flaws or weakness, Powers said.

But research on laboratory rats reveals a far different picture. Those studies show addiction occurs in the older, “reptilian” part of the midbrain, an area beneath consciousness that governs basic survival needs like food, safety and sex. Addiction doesn't involve the prefrontal cortex, the seat of reason, decision-making and other higher-order thinking.

In addiction, drugs and alcohol “hijack” the brain, Powers said. For the addict, the surge of the neurotransmitter dopamine — the “reward” triggered by chemical use — takes on the very aspect of a survival need.

Researchers starved addicted rats and then presented them with food and water — or the drug. Over and over, they chose the drug, even crossing an electrified bridge to get to it, until they died.

For human addicts and alcoholics, “the electrified bridge they become willing to cross is the lying,” said Powers. “It's the pain caused to loved ones.” Denial looms large. Addiction, Powers said, is “the only disease that tells the sufferer he doesn't have a disease.”

The neural pathways created in addiction never completely go away, Powers said, making addiction a chronic, incurable disease that can nonetheless be managed, like diabetes.

Yes, addiction does involve an element of personal choice, Powers acknowledged. But that's true of most chronic diseases, such as diabetes, high blood pressure, heart disease, even some cancers. In high school, he said, when most young people take their first drink or drug, few contemplate the possibility of addiction down the road.

“I chose to drink, but I didn't choose addiction,” he said. “When you choose to eat a cheese pizza, are you choosing to have a heart attack?”

Nor does addiction spring from a lack of willpower, Powers said. Like many addicts, he said, he has a surfeit of the stuff, personal discipline that got him through medical school, despite having attention-deficit disorder, and regularly powers him through marathons.

Some studies suggest those prone to addiction may have higher-than-average intelligence.

One study “found that doctors with addictions were in the top third of their class,” he said.

A new compassion

Addiction has a strong genetic component, studies have shown. Those without alcoholism in their family tree have a 10 percent chance of becoming an alcoholic; the number zooms up to 40 percent for those who do.

But genetics doesn't fully explain why some people become addicts and others don't.

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*– Dr. Jason Powers, Right
Step Spirit Lodge*

One study of a group of 13-year-old boys — half the sons of alcoholic fathers, the other half not — showed that those genetically predisposed to addiction had dramatically higher brain reactions to alcohol. This suggests there may be some fundamental difference in the brains of those who go on to become addicted to chemical substances, Powers said.

Slowly, the new science has shifted the focus from punishment to treatment for those whose addictions get them in trouble with the law, a trend manifest in the creation of drug courts and jail diversion programs, as has happened in past years in Bexar County.

Addiction is an expensive problem: Nationwide, an estimated \$600 billion is spent each year on incarceration, lost productivity, health care and other costs, studies show.

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– Kevin Brown, AHISD

There were more than 7,500 arrests for drunken driving in Bexar County in fiscal year 2013, according to the district attorney's office. Though not everyone arrested for DWI is addicted, it is an indication of drinking patterns.

“We all need to be armed with information about addiction,” said Sharon O'Malley Burg, a board member of the [Palmer Drug Abuse Program](#), which brought Powers to San Antonio and provides drug education, counseling and other services to teens, young adults and families.

“It's so easy to say 'That's not me,' to look the other way,” she said. “But kids in all neighborhoods, particularly in affluent ones like Alamo Heights, have access to drugs and the means to buy them. We must break the silence.”

Kevin Brown, superintendent of the Alamo Heights Independent School District, said Powers' talk was part of a larger [wellness program](#) the district created five years ago to help keep students safe and healthy.

Lectures are an element seeking to foster “authentic” dialogue between parents, students and staff on issues that some would rather ignore — from eating disorders to relationship problems, he said.

“Drugs and alcohol are a national problem, at every private and public school in America,” Brown said. “We decided to address it head-on. If you don't acknowledge it, you can't do anything about it.”

Like with diabetes and other chronic diseases, relapse is often a feature of those trying to recover from addiction, Powers said. But for at least half of those who enter treatment or attempt recovery, long-term sobriety is a reality.

End

Note: Dr. Jason Z. W. Powers is Chief Medical Officer of the [Right Step Spirit Lodge](#) located in Houston, TX.