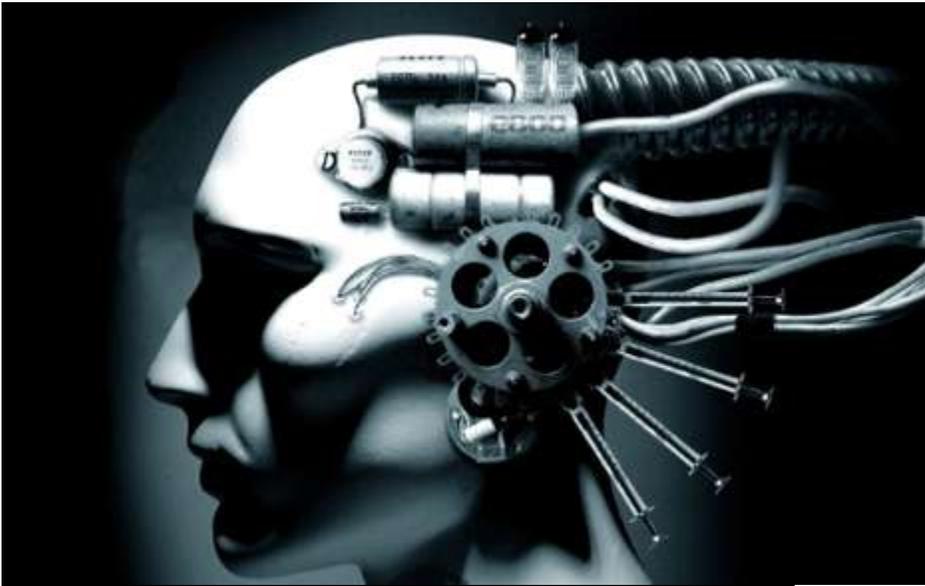


# A New View of Addiction Stirs Up A Scientific Storm

By *Jennifer Matesa* 08/16/11

A group of leading American addiction experts recently released a sweeping new definition of addiction, sending the the powerful psychiatric lobby into a tail-spin.



Addiction is a disease of the brain. But how should it be treated?

If you think addiction is all about booze, drugs, sex, gambling, food and other irresistible vices, think again. And if you believe that a person has a choice whether or not to indulge in an addictive behavior, get over it. The American Society of Addiction Medicine (ASAM) blew the whistle on these deeply held notions with its official release of **a new document defining addiction** as a chronic neurological disorder involving many brain functions, most notably a devastating imbalance in the so-called reward circuitry. This fundamental impairment in the experience of pleasure literally compels the addict to chase the chemical highs produced by substances like drugs and alcohol and obsessive behaviors like sex, food and gambling.

The definition, a result of a four-year process involving more than 80 leading experts in addiction and neurology, emphasizes that addiction is a primary illness—in other words, it's not caused by mental health issues such as mood or personality disorders, putting to rest the popular notion that addictive behaviors are a form of "self-medication" to, say, ease the pain of depression or anxiety.

Indeed, the new neurologically focused definition debunks, in whole or in part, a host of common conceptions about addiction. Addiction, the statement declares, is a "bio-psycho-socio-spiritual" illness characterized by (a) damaged decision-making (affecting learning, perception, and judgment) and by (b) persistent risk and/or recurrence of relapse; the unambiguous implications are that (a) addicts have no control over their addictive behaviors and (b) total abstinence is, for some addicts, an unrealistic goal of effective treatment.

The bad behaviors themselves are all symptoms of addiction, not the disease itself. "The state of addiction is not the same as the state of intoxication," the ASAM takes pains to point out. Far from being evidence of a failure of will or morality, the behaviors are the addict's attempt to resolve the general "dysfunctional emotional state" that develops in tandem with the disease. In other words, conscious choice plays little or no role in the actual state of addiction; as a result, *a person cannot choose not to be addicted*. The most an addict can do is *choose not to use* the substance or engage in the behavior that reinforces the entire self-destructive reward-circuitry loop.

Yet ASAM pulls no punches when it comes to the negative consequences of addiction, declaring it an illness that "can cause disability or premature death, especially when left untreated or treated inadequately."

The new definition leaves no doubt that all addictions—whether to alcohol, heroin or sex, say—are fundamentally the same. Dr. Raju Haleja, former president of the Canadian Society for Addiction Medicine and the chair of the ASAM committee that crafted the new definition, told *The Fix*, "We are looking at addiction as one disease, as opposed to those who see them as separate diseases. Addiction is addiction. It doesn't matter what cranks your brain in that direction, once it has changed direction, you're vulnerable to all addiction." That the society has stamped a diagnosis of sex or gambling or food addiction as every bit as medically valid as addiction to alcohol or heroin or crystal meth may spark more controversy than its subtler but equally far-reaching assertions.

The new definition comes as the American Psychiatric Association (APA) is undertaking a highly publicized, decade-in-the-making revision of its own definition of addiction in its *Diagnostic and Statistical Manual of Mental Disorders*—the bible of the mental health profession. The APA's DSM will have a larger effect on public health policies that guide addiction treatment, largely because insurance companies are mandated by law to use the DSM diagnostic categories and criteria to decide which treatments they will pay for.

Dr. Haleja told *The Fix* that the ASAM definition arose partly out of a disagreement with the DSM committee; although the DSM will define addiction as a disease, its symptoms (and therefore diagnostic criteria) will still be viewed mostly as discrete behaviors. Also, the DSM will define each type of addiction as a separate disease, instead of the singular and unified notion of disease that the ASAM proposes. "In terms of treatment, it becomes very important that people don't focus on one aspect of the disease, but the disease as a whole," says Haleja. Far from being a failure of will or morality, addictive behaviors are the addict's attempt to resolve the general "dysfunctional emotional state" that develops in tandem with the disease. In other words, conscious choice plays little or no role in the actual state of addiction; as a result, a person cannot choose *not* to be addicted.

Though addicts can't choose not to be addicts, they can choose to get treatment. Recovery, ASAM says, is best realized not just by self-management and mutual support groups such as 12-step fellowships, but also with trained professional help.

Some addiction-medicine specialists see the sweeping new definition as a validation of what has, since the publication of *Alcoholics Anonymous* in 1939, come to be known as "the disease concept" of addiction. "Many people in the population at large see addiction as a moral problem—'Why don't they just stop?'" says Dr. Neil Capretto, medical director of

Gateway Rehabilitation Center in Pittsburgh and an active ASAM member. “For experienced people working in addiction medicine for years, we know it’s a brain disease.”

Does this statement push the 12 steps, the mainstay of many treatment centers, programs and clinicians, toward obsolescence? After all, when a problem is declared to be a “medical” issue, doesn’t that imply that the solution should also be “medical”—as in doctors and drugs? “Both approaches have applicability,” says Dr. Marc Galanter, professor of psychiatry at New York University, founding director of its Division of Alcohol and Substance Abuse as well as director of its Fellowship Training Program in Addiction Psychiatry. “The fact that addiction is a disease doesn’t mean it’s *only* susceptible to drugs.” Says Capretto: “This new definition does not say that psychological or spiritual approaches are not important. My concern is that some people who really don’t understand the broader scope of addiction will see it only as a disease of brain cells. We’re not treating computers—it’s in the total human being who is, as the definition says, a 'bio-psycho-socio-spiritual' creature, and who will still need help in those areas.”

With its no-stone-unturned statement (it runs to eight pages, single-spaced, including footnotes), ASAM has come down—mostly—on one side of the chicken-and-egg question that has long befuddled people interested in addiction, physicians and recovering addicts alike: which came first, the neurological disorder or the compulsive behaviors and substance use? The definition states that abnormalities in the neurological system’s reward wiring—communication between areas of the brain, particularly those that process memory, emotional response and pleasure—come first, and drive the addict into a doomed pursuit to compensate for the reward-system imbalance through the addictive behavior. But later, the document notes that these behaviors themselves can damage the reward circuitry and lead to impaired impulse control and addiction.

The statement conforms, in its general outlines, with the prevailing premise in cutting-edge addiction science that the natural reward system designed to support human survival becomes overtaken or hijacked by the chemical payoff provided by substance use or addictive behaviors. “The reward circuitry bookmarks things that are important: eating food, nurturing children, having sex, sustaining intimate friendships,” says Dr. Mark Publicker, medical director of Mercy Recovery Center in Portland—Maine’s largest rehab—and former Regional Chief of Addiction Medicine for Kaiser Permanente Mid-Atlantic Region.

When we use alcohol or drugs, Publicker says, the chemical reward—the “high”—is many times more powerful than the natural circuitry’s reward, and the neurological system adapts to the flood of neurotransmitters. “But because we didn’t evolve as a species with OxyContin or crack cocaine, that adaptive mechanism overshoots. So it becomes impossible to experience a normal sense of pleasure,” he continues. “Use of the substance then happens at the expense of what otherwise would promote survival. If you think about it from that standpoint, it begins to account for illness and premature death.” An active addict has a very high risk of early death via sickness or suicide.

The statement raises repeated alarms about the danger posed by the development by teens and young adults of habits of consumption of substances because their brains are still in the process of maturation, and the chemical “hijacking” of the reward system may result in earlier and more serious addiction behaviors. While firmly grounded in the neurological disease model of addiction, the definition by no means discounts genes (it attributes about half of the cause to your DNA inheritance). It’s careful to say that environmental factors affect whether and how much the genetics will tip the scales. The statement notes that “resiliencies”

acquired through parenting and life experience can inhibit genetic expression of addiction. “Genetics is tendency, not destiny,” Capretto says.

Psychological and environmental factors, such as exposure to trauma or overwhelming stress, distorted ideas about life’s meaning, a damaged sense of self, and breakdown in connections with others and with “the transcendent (referred to as God by many, the Higher Power by 12-steps groups, or higher consciousness by others)” are also acknowledged as having an influence.

In addition, ASAM further says that understanding reward systems is just a part of understanding addiction’s neurobiology. Scientists are still trying to comprehend how some addicts become preoccupied with certain drugs or behaviors and other addicts with others; how some addicts become triggered to use by some events that don’t affect others; and how cravings can persist for decades after a complete recovery.

The statement attempts to put forth diagnostic hallmarks, all of which are behavioral: inability to abstain; impaired impulse control; cravings; diminished grasp of one’s problems; and problematic emotional responses.

Is it a problem that the definition is incapable of pointing to a quantifiable diagnostic marker of this illness? “I may be stating the obvious, here,” Publicker says, sighing, “but you don’t need to do brain imaging to identify an active alcoholic.”

In fact it emphasizes that “the quantity and frequency” of addictive symptoms—like how many drinks you down in a day or how many hours you spend masturbating—is no more or less of a marker than the “qualitative [and] pathological way” the addict responds to stressors and cues by continued pursuit in the face of growing adverse consequences.

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Publicker, an active ASAM member for 30 years and a proponent of medication-assisted therapy for addiction, notes that addiction recovery depends on treatment of psychological, social and spiritual aspects of the illness—not just its biological aspects. “It’s called medication-assisted therapy, not therapy-assisted medication,” he says. “Medication alone fails. I’ve seen this over a very long career. But it can really make a difference in people struggling to relapse.”

He draws the analogy with depression: “If you ask most people what depression is, they’ll answer it’s a serotonin deficiency disorder and that the solution is to put somebody on an SSRI [antidepressant medication]. But that’s a simplistic and inefficient way of managing depression. Medication can be helpful, but it needs to be combined with talk. We live in an era now where talk is not reimbursed.” It remains to be seen whether ASAM’s new branding of

addiction as a full-bore biological illness will help addicts obtain reimbursement for treatment. In terms of insurers, clarifying that the illness has “biological roots”—stipulating that it’s not the patient’s fault he or she has the illness—may break down reimbursement roadblocks.

Capretto agrees: “Things like this definition help bring addiction more into the scope of other diseases, so for the future it will mean fewer barriers for people wanting to get help.”

One of ASAM's unstated goals was obviously to fight against the stubborn social stigma against addiction experienced by many addicts. “There’s no question they set out to destigmatize addiction,” Publicker says. “Nobody chooses to be an addict. The concern that I have is placing blame on the patient. It takes a very long time for the brain to normalize. While it’s waiting to happen, you’re feeling bad, your thinking is impaired, and it’s a setup for relapse. Patients are likely to be blamed for relapse, and families see them as unmotivated and weak. But that’s the disease of addiction.”

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*Jed Bickman contributed additional reporting for this article. He has written for *The Nation*, *The Huffington Post*, and *Counterpunch.com* and will publish his first piece for *The Fix* next week on the new definition of addiction in the revision of the APA's DSM and its political and policy implications for people.*



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