THE DISEASE MODEL

Where our understanding of addiction began

Benjamin Rush • Thomas Trotter • E. M. Jellinek

A change in the question

For centuries, problematic drinking was often interpreted mainly through morality, character and self-control. The disease model helped change the central question from *“Why won’t this person simply stop?”* to *“What has happened biologically, psychologically and socially that makes stopping so difficult?”* That shift helped create space for treatment rather than punishment - but the model has also been debated, refined and broadened.

Why this history matters

Ideas about addiction shape how people are treated. When substance dependence is understood only as weakness or bad character, shame can become part of the response. A medical framework challenged that assumption by arguing that repeated, harmful use could involve processes that were not adequately explained by morality alone.

The modern position is more nuanced. Substance use disorders are recognised health conditions, and contemporary science examines changes in brain function and behaviour alongside genetics, development, learning, trauma, mental health, relationships and the wider social environment. No single model explains every person's experience.

This guide follows three important historical figures - Rush, Trotter and Jellinek - and then asks what their legacy means for the way we understand addiction today.

Important language note

Historical writers used terms such as “drunkenness” and “alcoholism”. They are retained here only when discussing historical ideas. Current clinical language commonly uses **alcohol use disorder** or **substance use disorder**, which better reflects a spectrum of severity.

This resource is educational, not a diagnosis or substitute for medical care. Alcohol and some drug withdrawals can be medically dangerous. Anyone who may be physically dependent should seek appropriate medical advice rather than abruptly stopping without support.

1. Benjamin Rush: challenging a purely moral explanation

Benjamin Rush (1746-1813), an American physician, is frequently identified in histories of addiction as an early medical voice on habitual drunkenness. His late-eighteenth-century writing described excessive use of distilled spirits in terms that helped move discussion toward bodily and medical consequences.

Rush was writing in a very different scientific and social world from ours. His work should not be read as modern addiction medicine. Nevertheless, his importance lies in helping establish the idea that persistent harmful drinking could be studied as a condition with causes, patterns and consequences - rather than being understood only as a moral defect.

What changed?

The emerging medical view did not erase moral judgement overnight. Instead, it created another framework: a person might be experiencing an illness-like process requiring intervention. That possibility was historically significant because it opened the door to observation, prevention and treatment.

A useful distinction

Medicalising a problem is not the same as removing personal agency. A health model can recognise that choices still matter while also recognising that dependence, withdrawal, conditioned learning, stress and changes in motivation can make those choices much harder to enact.

2. Thomas Trotter: drunkenness as a subject for medicine

Scottish physician Thomas Trotter published *An Essay, Medical, Philosophical, and Chemical, on Drunkenness, and its Effects on the Human Body* in 1804. The work examined definitions, symptoms, bodily effects, diseases associated with drinking, and methods for correcting habitual drunkenness.

Trotter's contribution matters because the title and structure themselves show the transition taking place: habitual drunkenness was being examined systematically as a medical and behavioural phenomenon. His work predates modern neuroscience, diagnostic criteria and evidence-based treatment, so it should be understood as an early historical step rather than a current clinical guide.

The wider significance

Rush and Trotter helped establish a vocabulary in which persistent harmful drinking could be investigated. That was a foundation on which later theories of alcohol dependence developed. Their ideas were imperfect and embedded in their eras, but they contributed to a long shift from condemnation alone toward treatment and scientific enquiry.

3. E. M. Jellinek and the twentieth-century disease concept

E. M. Jellinek (1890-1963) became one of the most influential figures in twentieth-century alcohol studies. His 1960 book *The Disease Concept of Alcoholism* organised existing clinical observations and research into a widely discussed framework.

Jellinek described different “species” of alcoholism using Greek letters: alpha, beta, gamma, delta and epsilon. Importantly, he did **not** claim that every form of problematic drinking was a disease. He regarded gamma and delta forms as the clearest disease entities, linked respectively with features such as loss of control and inability to abstain.

Why Jellinek became so influential

His work offered clinicians and researchers a structured way to talk about heterogeneous drinking problems. Later scholarship has criticised and revised aspects of his typology, but his disease concept became deeply influential in treatment culture and in public understanding of alcoholism.

A common misconception

The historical disease model was never quite as simple as “anyone who drinks too much has one progressive disease”. Even Jellinek distinguished between different patterns and explicitly did not classify every pattern as disease.

A short historical timeline

Late 1700s	Benjamin Rush argues for a medical understanding of habitual drunkenness and its effects.
1804	Thomas Trotter publishes a medical, philosophical and chemical essay on drunkenness.
1940s-50s	Alcohol research expands; clinical observation and emerging research increasingly influence classification.
1960	Jellinek publishes The Disease Concept of Alcoholism and describes several 'species' of alcoholism.
Today	Substance use disorders are understood through biological, psychological and social evidence, with multiple treatment pathways.

What Jellinek did not have

He was working before today's neuroimaging, genetics, modern diagnostic systems and large evidence bases for medication and psychological treatment. His framework therefore belongs in the history of addiction science, not as a complete map of what we now know.

4. What the disease model means today

Modern medical accounts of addiction emphasise that repeated substance exposure can affect brain systems involved in reward, learning, stress, motivation and self-control. The US National Institute on Drug Abuse describes addiction as a treatable medical disorder affecting the brain and behaviour, while also recognising biological and environmental risk factors.

This does **not** mean that every person who uses a substance will develop addiction, that recovery is impossible, or that biology is destiny. It means that severe, compulsive patterns of use can involve changes that make behaviour increasingly difficult to regulate, particularly in the presence of cues, withdrawal, stress or powerful learned associations.

What the model can contribute

Reducing blame: it challenges the idea that dependence is simply a lack of character.
Supporting treatment: it legitimises medical care, psychological treatment and long-term support.
Explaining relapse risk: it helps explain why vulnerability may persist after a period without use.
Encouraging research: it directs attention toward mechanisms that can be measured and treated.

Where the model can become too narrow

A purely biological explanation can miss why a substance became important in the first place. For one person it may have reduced trauma symptoms; for another it may have offered belonging, relief from anxiety, sleep, stimulation, escape from poverty or chronic stress, or a way of surviving overwhelming emotion.

The biopsychosocial view

A fuller formulation asks about **biology** (genetics, withdrawal, physical health, neuroadaptation), **psychology** (learning, trauma, emotions, beliefs, coping, neurodivergence), and **social context** (relationships, housing, culture, isolation, work, poverty, access to treatment and community).

The most helpful question is often not “Which single model is correct?” but “Which combination of factors helps us understand this person's pattern, needs and route toward change?”

5. Looking beyond the label

A diagnosis can help someone access treatment, but it cannot tell the whole story. Two people can meet criteria for the same substance use disorder while having very different histories, triggers, protective factors, risks and goals.

Questions that create understanding

What does the substance do for the person in the short term? What happens just before use? What feelings, sensations or memories become easier to tolerate? What happens afterwards? What are the costs? What makes change frightening? What relationships or environments reinforce the pattern? What strengths already exist?

Anonymous perspective

“For a long time I thought the fact that I kept going back meant I was weak. Understanding dependence differently did not take responsibility away from me. It helped me understand why willpower on its own had never been enough. Recovery started to feel less like proving I was a good person and more like learning what I needed in order to live differently.”

Recovery can involve many routes

Depending on the substance, severity and individual circumstances, support may include medically managed withdrawal, medication, harm-reduction approaches, motivational work, CBT or other psychological therapies, trauma-informed care, peer support, mutual-aid groups, family work, social support and practical help with housing, finances or employment.

There is no single recovery identity that everyone must adopt. Some people find the disease concept deeply relieving and useful; others prefer language based on learning, behaviour, trauma, social context or recovery capital. Good care can respect the person's own meaning-making while still taking risk and evidence seriously.

Reflection page

- ■ When I hear the word “addiction”, what assumptions come to mind?
- ■ Do I tend to see substance misuse as choice, illness, coping, learning - or a mixture?
- ■ What might the substance be providing or protecting the person from?
- ■ What changes when I replace “What is wrong with you?” with “What has happened, and what do you need?”
- ■ What would compassionate accountability look like here - understanding the difficulty while still supporting change?

6. A message from Maggie

Understanding is not excusing

Seeing substance dependence through a health and human lens does not mean pretending harmful behaviour has no consequences. It means recognising that shame rarely gives us the whole answer. We can hold boundaries, responsibility and safety alongside curiosity about what is driving the behaviour.

If you are reading this because substance use is affecting you or somebody you care about, you do not have to reduce the person to the substance. There is always a history, a nervous system, a set of relationships, a body and a life around the behaviour.

The disease model was important because it challenged the idea that addiction could be explained simply by bad character. Today we can go further. We can understand the medical aspects while also asking about trauma, distress, learning, neurodivergence, environment, relationships and the things that have helped a person survive.

Recovery is not about becoming worthy of care. Care, safety, information and appropriate support can be part of what makes recovery possible.

- Maggie, Space to Breathe Therapy

Books and further reading

E. M. Jellinek - *The Disease Concept of Alcoholism* (1960). Historically important; best read in its period context.
Marc Lewis - *The Biology of Desire*. Presents a learning-based critique of a simple brain-disease account.
Judith Grisel - *Never Enough*. Accessible neuroscience of addiction written by a behavioural neuroscientist.
Gabor Maté - *In the Realm of Hungry Ghosts*. A trauma- and compassion-oriented perspective; useful alongside broader evidence-based sources.

References and evidence base

• Trotter, T. (1804). *An Essay, Medical, Philosophical, and Chemical, on Drunkenness, and its Effects on the Human Body.* Wellcome Collection.
• Jellinek, E. M. (1960). *The Disease Concept of Alcoholism.*
• Jellinek, E. M. (1960). “Alcoholism, A Genus and Some of its Species.” *Canadian Medical Association Journal*, 83(26), 1341-1345.
• Babor, T. F. and colleagues. Historical reviews of alcoholism typologies and the Jellinek era.
• National Institute on Drug Abuse. *Drugs, Brains, and Behavior: The Science of Addiction.*

Support and safety

If alcohol or drug use is causing immediate danger, severe withdrawal, loss of consciousness, seizures, breathing difficulty or another medical emergency, seek urgent medical help. For non-emergency support, a GP or local alcohol and drug service can help assess risk and discuss treatment options.