Models of Addiction

This section teaches the six foundational models of addiction in depth — where each came from, what it claims, how it has been criticized, and what it means for treatment — then looks at how the field's thinking has evolved, how the models combine in real care, and several newer models researchers have added. A linked, annotated bibliography appears at the end so you can read further on anything that interests you.

> **What you'll take away from this section**
> - Why addiction is best understood through several models rather than one
> - What each of the six foundational models claims, where it came from, and what it misses
> - How the models translate into real treatment and relapse-prevention approaches
> - How newer, more specialized models refine the classic six

Five People, Five Answers

If you are new to this field, one of the first things you will notice is that almost nobody agrees on what addiction actually is. Ask a doctor, a counselor, a pastor, a researcher, and a person in long-term recovery, and you may walk away with five different answers. One calls it a disease. One calls it a choice. One calls it a symptom of old wounds. One points to the neighborhood and the people around the person. One calls it a crisis of meaning.

It is tempting to assume one of them must be right and the rest wrong. But a more useful way to look at it — and the way this section asks you to think — is that they are all standing in different spots around the same large, complicated thing, each describing the part they can see. That is really all a "model" is: **a vantage point.** Each one brings a piece of the picture into focus while leaving the rest a little blurry. Learning to walk around the problem and look through each lens, instead of betting everything on one, is one of the most useful habits a new counselor can build.

A quick word on why this matters in practice: the model a counselor (or a family, or a court) holds in their head quietly shapes how they treat a person. If you believe

addiction is a moral failing, you reach for accountability and consequences. If you believe it is a brain disease, you reach for medication and medical care. If you believe it is a response to pain, you reach for therapy. None of these is wrong, exactly — but each is incomplete on its own. The rest of this section walks through all six, one at a time.

The Six Foundational Models

Over the past century, the field has organized its thinking into six broad models of addiction (Rose, n.d.). Each one earned its place by getting something importantly right — and each one, taken alone, leaves something important out. Five of them look through a single lens; the sixth — the biopsychosocial model — is what you get when you hold the others together.

THE SIX MODELS AT A GLANCE

Model	Core idea	What it gets right	Its main limitation
Moral	Addiction is a failure of willpower and character	Personal responsibility matters in recovery	Ignores biology, trauma, and environment
Disease	A chronic, relapsing brain illness	Opened the door to medical care; reduces blame	Can imply a person is “powerless”
Psychological	A way of coping with emotions and thoughts	Targets triggers and thinking (CBT, MI)	Underweights the body and environment
Social	Shaped by peers, family, community, access	Makes environment part of treatment	Underweights individual biology
Biopsychosocial	Biology, psychology, and society interact	The most complete view	Harder to put into a single plan

Model	Core idea	What it gets right	Its main limitation
Spiritual	Rooted in disconnection from meaning	Meaning and connection aid recovery	May not resonate with everyone

The Moral Model

The moral model is the oldest, and the one most of us absorb without ever being taught it. It frames addiction as a failure of character — weak willpower, poor choices, personal irresponsibility — and treats the person as fully responsible both for having the problem and for solving it.

For most of human history this was the default view. Habitual drunkenness and drug use were seen as vices, and society responded with punishment and shame rather than help — a legacy you can still hear in the "war on drugs" and in everyday judgments about people who use substances.

The moral model is not just a relic, though. A serious version survives in modern philosophy, which still debates whether addiction truly removes a person's control. One influential middle position argues that addiction is not well captured by the idea of "compulsion" at all, and proposes **responsibility without blame** — holding people accountable as agents "while avoiding stigma and blame, and instead maintaining care and compassion" (Pickard, 2017). That phrase is worth remembering; it captures what a good counselor actually does.

The model's grain of truth is real: personal responsibility and choice genuinely matter in recovery, and treating people as capable agents (rather than helpless patients) can be empowering. But its blind spot is everything else — biology, trauma, environment — and its central "weakness of will" claim is hard to square with how addiction actually behaves, since people often keep using long after the drug has stopped being pleasurable. The human cost of the moral view is also well documented: framing addiction as a personal failing fuels stigma, and that stigma is "a common obstacle to help-seeking," producing "reduced empowerment and poorer treatment outcomes" (El

Hayek et al., 2024). Importantly, the rise of the disease model did not erase this moral blaming — the two views still coexist in how society talks about addiction.

> **For the counselor —** The moral model is the water we swim in, so the skill is to keep its one good idea (people are capable agents) while dropping its damage (blame and shame). "Responsibility without blame" is the everyday version of that balance.

The Disease Model

The disease model grew up as a direct correction to the moral view. It says addiction is a medical condition — a chronic, relapsing illness — rather than a flaw in someone's character, and that the addicted person is not simply choosing badly.

Its modern roots are usually traced to E. M. Jellinek, whose 1960 book The Disease Concept of Alcoholism recast habitual heavy drinking as a disease with identifiable types and a progressive course, including a "loss of control" form he considered a true disease (Jellinek, 1960). The model's contemporary form arrived decisively in 1997, when the director of the National Institute on Drug Abuse argued in Science that prolonged drug use changes the brain in fundamental and long-lasting ways, converting voluntary use into compulsive use — making addiction, in his words, a chronic, relapsing brain disease (Leshner, 1997). The most authoritative modern statement describes addiction as a three-stage cycle — binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation (craving) — driven by changes in the brain's dopamine reward system, its stress systems, and its prefrontal self-control circuits (Volkow et al., 2016).

This reframing did enormous good. It opened the door to medical treatment, and it was meant to replace shame with compassion by recasting addiction as an illness rather than a vice. Its biggest practical payoff is **medication**: because the model locates addiction in brain systems, it supports treating it like other chronic diseases and underwrites medication-assisted treatment — methadone and buprenorphine for opioid use disorder, naltrexone and acamprosate for alcohol (Volkow et al., 2016).

The disease model is also genuinely debated. The neuroscientist Marc Lewis argues that the brain changes seen in addiction reflect normal, if intense, learning and development

rather than pathology — and that the disease label can itself become an obstacle to healing (Lewis, 2017). The other risk is subtler: pushed too far, "it's a disease" can sound like "you are powerless," which is only part of the story.

> **For the counselor —** The disease model is why we can say to a client, without irony, "this is not a character flaw, and there is medicine that helps." Use it for exactly that — to reduce shame and open the door to medical care — while remembering it is a lens, not the whole truth.

The Psychological Model

The psychological model turns the focus inward, to the mind. It sees addiction as bound up with emotions, thoughts, and mental health — a way of coping with pain, reinforced by the beliefs and thought patterns a person carries.

Its most influential idea is the **self-medication hypothesis**, introduced by psychiatrist Edward Khantzian: people do not choose substances at random, but gravitate to the drug whose effect best relieves "the dominant painful feelings with which they struggle" (Khantzian, 1985). Alongside the emotional story sits a cognitive one: people hold distorted beliefs and expectancies about what a substance will do for them, and these thoughts help maintain use even as the consequences mount. From this angle, substance use is not senseless — it is an attempt to cope or to feel better, however costly that attempt becomes.

This model is the engine behind talk-based treatment, and the evidence is solid. Cognitive-behavioral therapy (CBT) — which targets triggers, distorted thinking, and coping skills — outperforms no or minimal treatment and is among the most studied approaches in the field (Magill et al., 2019). Dialectical behavior therapy, a relative of CBT built for people who struggle with intense emotions, applies the same logic to emotional regulation. And motivational interviewing (MI), a collaborative style for resolving ambivalence, shows a modest but real benefit for substance use (Schwenker et al., 2023).

The model's limit is that it can underweight the body and the environment, and its signature idea is debated: emotional pain and distorted thinking clearly contribute to addiction, but they are one thread, not the whole rope.

> **For the counselor —** The psychological model gives you the questions that open people up: What does using do for you? What were you feeling right before? It reframes substance use as an attempt to cope — which is both more accurate and more workable than treating it as senseless.

The Social Model

The social model widens the lens to everything around the person. It holds that addiction is shaped by social and environmental forces — peers, family, social norms, the availability of substances, and socioeconomic conditions — rather than by individual characteristics alone.

Its theoretical root is Albert Bandura's social learning theory, which holds that behavior is learned through observation, modeling, and reinforcement — the basis for the well-supported finding that people who watch family and peers use are more likely to use themselves (Bandura, 1977). A large review of social determinants found that negative peer influence, neighborhood instability, trauma, and criminal-justice involvement raise risk, while parental support, education, employment, and positive social support protect against it (Lin et al., 2024).

The social model's treatment payoff is to treat a person's surroundings as part of the plan. Its clearest expression is peer-run **recovery housing** — sober, self-governed homes rooted in the idea that the basis of authority is lived recovery experience, not formal credentials (Mericle et al., 2023). The most studied example, the Oxford House model, produced markedly better two-year outcomes than usual aftercare in a randomized trial — roughly 31% reporting substance use versus 65%, alongside higher employment and lower incarceration (Jason et al., 2006).

Its limit is the mirror image of the moral model's: by emphasizing environment, it can underweight individual biology. And in practice, social-model programs are unevenly implemented and have been pushed to the margins by funding and professionalization pressures that favor clinical care (Mericle et al., 2023).

For the counselor — The social model turns "willpower" into something concrete and changeable: who and what surrounds your client. Helping someone build sober relationships, stable housing, and a new routine is treatment, not an afterthought.

The Biopsychosocial Model

The biopsychosocial model is the field's attempt to put the pieces together. Rather than choosing among biology, psychology, and social life, it holds that all three interact to produce addiction, and that a good plan has to address all three at once.

It began outside addiction entirely. In 1977 the physician George Engel argued that medicine's purely biological model "leaves no room within its framework for the social, psychological, and behavioral dimensions of illness," and proposed the biopsychosocial model as "a blueprint for research, a framework for teaching, and a design for action" (Engel, 1977). Applied to addiction, it holds that "biological, genetic, personality, psychological, cognitive, social, cultural, and environmental factors interact to produce the substance use disorder, and multiple factors must be addressed in prevention and treatment programs" (Skewes & Gonzalez, 2013). It is the most complete of the six models, and the reason this course studies it in its own content area.

The model is not without critics. Its most famous charge is that it is too vague — that it has "devolved into mere eclecticism" (Ghaemi, 2009), often summed up as giving clinicians permission to do everything but guidance to do nothing. For a working counselor, the practical answer to that critique is to use the model as a checklist rather than an excuse: its value is that it forces you to ask about the body, the mind, and the world for every client, and to build a plan that touches more than one.

For the counselor — When a case feels stuck, the biopsychosocial model is the checklist: Have we addressed the biology (medication, health)? The psychology (thinking, trauma, mood)? The social world (housing, relationships, work)? Most stalled cases are missing one of the three.

The Spiritual Model

The spiritual model speaks to meaning. It frames addiction as rooted in disconnection — from purpose, from others, from something larger than oneself — and sees recovery as partly a matter of rebuilding that connection.

This is the oldest organized form of addiction help in America. Alcoholic-led mutual-aid fellowships stretch back to the 1800s and run directly into Alcoholics Anonymous, founded in 1935, whose Twelve Steps frame recovery as a program of spiritual growth. A careful review of the scholarship on spirituality and addiction found wide variation in how "spirituality" is defined, but identified "relatedness" and "transcendence" as its most common themes — which is the scholarly basis for the disconnection framing (Cook, 2004).

The model's treatment expressions have surprisingly strong evidence. A landmark review found that manualized AA / Twelve-Step Facilitation matched or beat other treatments such as CBT for keeping people continuously abstinent over the long run, while lowering health-care costs (Kelly et al., 2020). Mindfulness — a more secular descendant of contemplative practice — held up well in a controlled trial of mindfulness-based relapse prevention (Bowen et al., 2014).

Its limits are honest ones. "Spirituality" is hard to define and measure, the evidence base leans heavily on Twelve-Step frameworks, and the model "may not resonate with everyone" — a real concern for secular or differently-believing clients (Cook, 2004).

> **For the counselor —** The spiritual model is not about prescribing a religion; it is about taking seriously a client's need for meaning, belonging, and hope. For many people, connection — to a group, a purpose, a higher power — is the thing that makes recovery hold.

How Thinking About the Models Has Evolved

The model you will run into most often is the disease model, and even this widely held view is still being actively debated. In its modern form it holds that drugs and alcohol gradually rewire the brain until seeking the substance stops feeling like a choice and starts feeling like a compulsion (Volkow et al., 2016). But some respected researchers

argue the brain changes are better understood as the normal result of intense, repeated learning — the same machinery that builds any deep habit (Lewis, 2017) — and an entire book has been devoted to weighing the evidence on both sides (Heather et al., 2022). There is even a surprising twist: framing addiction purely as a brain disease has not reliably reduced stigma the way everyone hoped, and in some studies it made people view those who use drugs as more dangerous or less likely to recover (Snoek & Matthews, 2017).

The takeaway is not that the disease model is wrong. It is that **no single model tells the whole story** — which is exactly why we teach all six, and why the field keeps moving toward integration.

Why the Models Fit Together

Because each model looks at a different layer — the body, the mind, the environment, the spirit — they are less like rival teams and more like puzzle pieces. The biopsychosocial model is the field's main attempt to fit those pieces into one picture, and most current research keeps pushing in that direction: away from single-cause explanations and toward seeing addiction as many things happening at once.

Sometimes the models do pull against each other. The medical world and the peer-recovery world, for instance, have not always agreed about what "real" treatment looks like or who is qualified to provide it, and peer-led recovery was for a long time treated as second-class next to clinical care (Mericle et al., 2023). Yet when researchers actually compare the two, they tend to find similar results, with the peer-driven approach often reaching them at lower daily cost.

> **Key term — Recovery capital:** the sum of the resources a person can draw on to get and stay well — supportive relationships, stable housing, employment, health, and a sense of meaning. Building recovery capital is a goal shared across the social, psychological, and spiritual models.

In the real world, the models cooperate: the same person might lean on a medication from the disease model, the coping skills of the psychological model, the friendships of

the social model, and the sense of purpose the spiritual model emphasizes — all in the same week.

What Each Model Means in the Room

For a new counselor, the most practical gift of the models is that each one suggests a different way to help — and the approaches stack rather than compete. The table below is a quick recap of the treatment threads detailed above; the moral and biopsychosocial models are left off it because the moral model has no evidence-based treatment of its own and the biopsychosocial model simply combines the rest.

Model	What it points toward	Evidence in brief
Disease	Medication (e.g., methadone, buprenorphine)	Cut overdose-death risk by about a third to a half in overdose survivors (Larochelle et al., 2018)
Psychological	Talk therapy (CBT, DBT, MI)	Well-supported for CBT; modest, lower-certainty evidence for MI (Magill et al., 2019; Schwenker et al., 2023)
Social	Changing the environment (recovery housing)	Residents did far better over two years than those on their own (Jason et al., 2006)
Spiritual	Meaning and connection (AA, mindfulness)	Can match or beat other treatments long-term (Kelly et al., 2020; Bowen et al., 2014)

The thread running through that table is worth saying plainly: the approaches **stack.** Medication keeps an opioid-use-disorder client alive, but the medicine only helps while they stay connected to care — which is where the counseling relationship, the peer support, and the sense of purpose all come back in.

The Long View

It helps new counselors — and the people they serve — to know one hopeful fact up front: **recovery is the rule, not the exception.** A nationwide survey estimated that more than **22 million American adults** have resolved a serious problem with alcohol or drugs, and **nearly half** got there without any formal treatment or group at all (Kelly et al., 2017). People find their own roads.

The disease model adds a useful piece of perspective here. It reminds us that, like high blood pressure or asthma, substance use disorders tend to come and go, with relapse happening in something like **40 to 60 percent** of cases (National Institute on Drug Abuse, 2020).

> **For the counselor —** A relapse is not proof that someone failed or that treatment was useless. It is a signal — a sign to adjust the plan and keep going, the same way a doctor would adjust medication for any long-term condition.

Staying Well

Because relapse is common, a lot of the counselor's work is helping people stay well after the hardest part is over. The foundational map for this comes from the psychologist Alan Marlatt, who showed that relapse is rarely a single dramatic moment — it is usually a slow chain of events that builds over time (Larimer et al., 1999). His cognitive-behavioral model gives counselors a working vocabulary, and a few of its pieces are worth knowing by name:

- **High-risk situations.** Certain moments reliably precede relapse. Negative emotional states and interpersonal conflict together trigger more than half of all relapse episodes, and social pressure accounts for more than 20 percent (Larimer et al., 1999). Helping a client see their own high-risk moments before they arrive is half the battle.
- **Coping skills and self-efficacy.** Whether a high-risk moment leads to a lapse depends largely on whether the person has a coping response ready — and on their confidence that they can use it. Each time a person gets through a craving without using, that confidence grows.

- **The abstinence violation effect.** This is the trap where a single slip — one drink, one use — gets interpreted as total failure ("I've blown it, so I may as well keep going"), turning a lapse into a full relapse. Teaching the difference between a lapse (a single slip) and a relapse (a return to the old pattern) is one of the most valuable things a counselor can do.

> **Key term — Lapse vs. relapse:** A lapse is a single slip. A relapse is a return to the old pattern. The space between them is where a counselor does some of their most valuable work — helping a person treat a slip as a stumble, not a verdict.

Newer Maps of the Same Territory

The six foundational models are the bedrock, but addiction science has kept drawing new maps. Most of these newer models do not replace the classics so much as **zoom in on one part of them** — and a couple sharpen a classic directly. None of them needs to be memorized in detail, but each carries a useful idea for the counseling room.

- **Incentive-Sensitization.** Developed by Robinson and Berridge, this model separates wanting a drug from liking it. Over time the brain's "wanting" system can grow hypersensitive to drug-related cues, so a person can be ambushed by intense craving even after the drug has stopped being enjoyable (Robinson & Berridge, 1993). The lesson: craving is a wiring problem, not a willpower problem.
- **Learning / Behavioral.** This view treats addiction as a behavior the brain has been rewarded for — and turns that around therapeutically. Contingency management, which gives concrete escalating rewards for verified abstinence, noticeably improves outcomes (Higgins et al., 1994). Pair the rewards with skill-building so the gains last.
- **Cognitive.** Here the focus is on what people expect a substance to do for them and on the automatic pull of cues, both of which drive use more than the cold facts about harm do (Wiers & Stacy, 2006). Work on the expectations and the autopilot, not just the information.
- **Choice / Behavioral-Economics.** This model frames addiction as a tilt toward immediate rewards over larger later ones. Helping a person build drug-free sources

of satisfaction and reconnect with their future literally changes the math of their choices (Bickel et al., 2014).

- **Sociocultural / Environmental.** A sharpening of the social model, this view locates risk at the societal scale — culture, inequality, and the simple availability of substances (Lin et al., 2024). Connection and a stable environment are themselves treatment.
- **Developmental / Life-Course.** This model follows risk across a lifetime. Early adversity casts a long shadow — adults with many adverse childhood experiences carry several times the risk of addiction (Felitti et al., 1998) — and the still-developing adolescent brain is an especially vulnerable window (Chambers et al., 2003). Ask about history; the teenage years matter.
- **Habit / Compulsion.** With heavy, long-term use, behavior shifts from a deliberate choice to an automatic routine the brain runs largely on its own (Everitt & Robbins, 2016). Breaking cues and rebuilding daily routines becomes as important as motivation.
- **Integrative / Systems.** The most encompassing of the newer models extends the biopsychosocial view with systems thinking — addiction as a web of interacting parts rather than a single cause (Engel, 1977). It is the formal version of the point all the models, taken together, were circling: treat the whole person.

Key Takeaways

- **No single model explains addiction.** Each is a vantage point that captures part of the picture; the skill is using several together.
- **The model you hold shapes how you treat people** — toward blame, medication, therapy, environment, or meaning. Knowing all six keeps you flexible.
- **The biopsychosocial model ties the others together** — biology, psychology, and social life interact, and good care addresses all three.
- **Each model implies a treatment,** and those treatments stack rather than compete: medication, therapy, environment, and meaning all have a role.
- **Recovery is common** — more than 22 million Americans have resolved a substance problem — and **relapse is a signal, not a failure.**
- **Newer models refine the classics** by zooming in on craving, learning, cognition, choice, environment, development, habit, and systems.

Bibliography & Further Reading

Every source below is linked and briefly annotated so you — or a learner new to the field — can follow up on anything that sparks your interest and begin to see how to source information from credible places. Sources are grouped as the foundational/classic works, contemporary research, and the current debate over how to model addiction.

Overview source for this section

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— The canonical critique that the biopsychosocial model became "eclecticism," giving clinicians permission to do everything but guidance to do nothing.

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— Argues the brain changes in addiction reflect normal learning and development rather than disease.

Snoek, A., & Matthews, S. (2017). Introduction: Testing and refining Marc Lewis's critique of the brain disease model of addiction. Neuroethics, 10(1), 1–6. https://doi.org/10.1007/s12152-017-9310-2
— Examines how the brain-disease framing affects stigma, and why it has not reduced it as much as hoped.

QUIZ

Questions:

1. What is the primary focus of the self-medication hypothesis in addiction?
A. People choose substances randomly
B. People gravitate to drugs that relieve painful feelings
C. Addiction is solely a moral failing
D. Addiction is purely biological

2. Which model of addiction emphasizes the importance of personal responsibility and choice in recovery?
A. The Moral Model
B. The Disease Model
C. The Psychological Model
D. The Biopsychosocial Model

3. What is a significant limitation of the disease model of addiction?
A. It ignores the role of social factors
B. It does not support medication-assisted treatment
C. It implies a person is powerless
D. It focuses solely on personal responsibility

4. What does the biopsychosocial model of addiction integrate?
A. Only biological factors
B. Only psychological factors
C. Only social factors
D. Biology, psychology, and social factors

5. What is a common consequence of framing addiction as a personal failing?
A. Increased empowerment
B. Improved treatment outcomes
C. Fueling stigma
D. Enhanced understanding of addiction

6. What is the primary focus of the biopsychosocial model in addiction treatment?
A. To address only psychological factors

B. To integrate biological, psychological, and social factors
C. To focus solely on medication
D. To emphasize spiritual beliefs

7. According to the document, what is a significant outcome of peer-run recovery housing compared to usual aftercare?
A. Higher rates of substance use
B. Lower employment rates
C. Better two-year outcomes
D. Increased incarceration rates

8. What does the social model of addiction suggest about the influence of peers?
A. Peers have no impact on substance use
B. Peer influence is a significant risk factor
C. Peer support is irrelevant
D. Peer behavior is only learned through genetics

9. What is a common critique of the biopsychosocial model mentioned in the document?
A. It is too vague and eclectic
B. It lacks a clear definition
C. It is too specific and narrow
D. It focuses only on social factors

10. What is the relationship between the disease model and stigma according to the document?
A. The disease model reduces stigma effectively
B. The disease model has no impact on stigma
C. The disease model can increase stigma in some cases
D. The disease model eliminates all stigma

11. What percentage of relapse episodes are triggered by negative emotional states and interpersonal conflict?
A. 20%
B. 40%
C. 50%
D. More than 50%

12. According to the document, what is the primary focus of the cognitive model in addiction treatment?

A. Expectations about substances
B. Physical withdrawal symptoms
C. Social influences
D. Genetic predisposition

13. What does the abstinence violation effect refer to in the context of addiction recovery?

A. A complete recovery from addiction
B. A single slip interpreted as total failure
C. The process of relapse prevention
D. The initial phase of treatment

14. Which model emphasizes the importance of societal factors in addiction risk?

A. Cognitive model
B. Sociocultural / Environmental model
C. Incentive-Sensitization model
D. Developmental / Life-Course model

15. What is a key component of the learning/behavioral model in addiction treatment?

A. Coping skills training
B. Family therapy
C. Contingency management
D. Medication management