

Clinical Addiction Psychiatry

Edited by

David Brizer and Ricardo Castaneda



CAMBRIDGE
UNIVERSITY PRESS

Contents

Contributors vii

Preface ix

Part 1 – Theory

- 1 **Death, drugs, and rock & roll** 3
David Brizer
- 2 **The disease concept – controversies and integration** 12
Mark Schenker
- 3 **Medical sequelae of addiction** 24
Michael Weaver
- 4 **Suicide and substance abuse** 37
Samoon Ahmad
- 5 **Abstinence as a goal** 45
Laurence M. Westreich
- 6 **Ibogaine therapy for substance abuse disorders** 50
Deborah C. Mash
- 7 **Therapeutic communities in the new millennium** 61
George De Leon
- 8 **Cosmetic psychopharmacology: drugs that enhance wellbeing, performance, and creativity** 72
Richard N. Rosenthal & Laurence M. Westreich
- 9 **Psychotherapeutic paradigms and the prescription pad: treating drug addiction with drugs** 88
Ed Paul
- 10 **Six key areas when working with addicts** 92
Kathleen Tracy

Part 2 – Real World

- 11 **The twelve-step approach** 97
Marc Galanter

- 12 **Alcoholism** 102
Jerome Levin
- 13 **Alcoholism in primary care** 125
Mack Lipkin, Andrea Truncali & Joshua D. Lee
- 14 **Nicotine addiction and smoking cessation** 133
Neil Hartman
- 15 **Clinical aspects of cocaine and methamphetamine dependence** 137
Arnold Washton
- 16 **Methadone treatment** 147
Robert Maslansky
- 17 **Psychoactive prescription drug abuse** 154
Bernard Salzman & Peter Micheels

Part 3 – Praxis

- 18 **Pain management and addiction treatment** 163
Robert Maslansky
- 19 **EEG neurofeedback therapy** 169
Siegfried Othmer & Mark Steinberg
- 20 **The new pharmacotherapies for alcohol dependence** 188
Barbara J. Mason & Marni Jacobs
- 21 **Dialectical behavior therapy adapted to the treatment of concurrent borderline personality disorder and substance use disorders** 207
Lisa Burckell & Shelley McMain
- 22 **Addiction and emergency psychiatry** 218
Richard Gallagher, Gregory Fernandez & Edward Lulo
- 23 **Ear acupuncture in addiction treatment** 230
Michael Smith

Index 251

Death, drugs, and rock & roll

David Brizer

Whether we like it or not, death is *the* universal concern.

The most cogent writing on the subject, aside from theological and spiritual tracts, is found in Ernst Becker's (1972) *The Denial of Death*. Becker, a philosopher gifted with a brilliant writing style, devotes each chapter in his book to a different human remedy for "the sickness unto death" (Kierkegaard, 2009) – mortality. Becker's conclusion, echoing that of his Luetic predecessor, Friedrich Nietzsche, is quite simply, "Human, all too human." Devotion to work, family, love, sex, addiction...in the final analysis, each falls short of allaying the pandemic fear. The final chapter of the Becker book takes a surprising leap straight toward heaven: the only way out of this literal "suffering unto death" is to embrace a spiritual belief.

Becker's perspective is of course based on fear. His perspective is dualistic, since he subscribes to the universal belief that death is the opposite number of life – that death is something bad, something we constantly strive to contain, minimize, or deny.

The terror, the abject fascination inspired by death, finds expression in countless works of art, music, and science. From epoch to epoch, from one civilization to the next, death is the chief catalyst of some of mankind's greatest cultural achievements. Consider, for example, the Faust motif, which sprouts like poison mushrooms after rain, taking innumerable forms in art, music, and in literature. The idea of trading one's immortal soul for infinite wisdom and riches and power, right here and now, is inextricably bound with the fear of death.

Of course, if one actually *has* an immortal soul, then there is little to fear. Such a belief was no consolation to Mann's (1948) *Doktor Faustus*.

Becker's ominous maunderings aside, most of us somehow manage to sidestep the issue – by means of work, relationships, and creativity—until it is staring us straight in the face. The performance and appreciation of great music is for many the apex of their

spiritual pyramid. The creative apogee, whether realized in music, writing, or any other form of artistic expression, is a secular variant of spiritual arrival.

How many have devoted – *sacrificed* – their lives in the pursuit of art? The lives of the composers, the painters, the actors and actresses, often read like Grand Guignol, like a soap opera dripping with blood, sweat, and tears. Alternately, their biographies read very much like *The Lives of the Saints* (Butler, 1788). The artist is a shaman, a kind of freak who suffers for the rest of us to keep our connection with "eternity" alive. The artist, struggling with his craft, shut away in his garret to wrestle with demons, is "Byronic." "You can't fool with Mother Nature." And, "You've got to suffer to play the blues." Anyone daring to loiter in Parnassus always pays, pays in unimaginable ways.

Beethoven's life – his interior life, in particular – is often considered a prime example of bartering "agony for art." Thomas Mann's novel, *Doktor Faustus*, depicts in shattering detail the legendary barter that this fictive Beethoven could have made. Mann's protagonist, Adrien Leverkühn, is a nineteenth-century version of Ludwig B., in Mann's *roman à clef*. Leverkühn, already an enormously accomplished pianist and composer, strives to reach his "personal best." His striving is so powerful – so persistent, so cosmically *loud* – that it is heard on the other (darker) side. A minion of Lucifer arranges the swap, and Leverkühn gets his wish: he becomes the greatest composer in the world. The price? The composer must suffer the death by child-bed fever of the only person he has ever loved, his adored and beautiful grandson. Would Leverkühn have signed on had he known the real terms of the pact?

Would you?

No doubt there are many who would grab the opportunity. The "peak" experience, the incomparable sensation of being "in the pocket" (described as "oceanic bliss" or as "flow"), is without question supremely appealing and supremely addicting. Some clinicians

actually advise their patients to accept life on a more even keel – to avoid moments of ecstasy or intense wellbeing intentionally, since the down side potential (craving for more!) is quite significant. This advice may sound puritanical, or repressive; on the other hand, the proffered wisdom is similar to some of the basic tenets of Buddhism, and, for that matter, of Alcoholics Anonymous.

Most of the suffering in life, it is held, is due to *attachment* and *desire*. “Desire” contains the potential (or promise!) for both fulfillment and often for devastating disappointment. If you can’t take the heat – namely, the troughs that invariably follow peaks – well, then, stay out of the sun.

The dividing line between clinical issues and spiritual ones is ambiguous here. Bipolar disorder is more common among creative artists (Redfield Jamison, 1993), but the temptation to ascribe all artistic, mystical, and other intense states of mind to manic-depressive illness is a vast oversimplification that should be avoided. Oceanic bliss, whether experienced by musician, yoga master, or lover, should not be confused with psychiatric illness. William James’ masterwork *The Varieties of Religious Experience* (originally 1902; then Dover Publications, 2002), is basically a 400-page travel guide to these perilous regions of oceanic bliss.

With all due respect (to Ernst Becker), who is to say which devotions are spiritual in nature, and which are “merely” secular? To confound the issue even further, death itself often takes on the allurements of erotic love.

The depiction of death – as final surrender to the vastness of the cosmos – is often highly erotic. The period of romanticism, especially in the culture of pre-Victorian Europe, is supercharged with depictions in art and literature of the allure of death. The works of Aubrey Beardsley, Charles Baudelaire, Lord Byron, Algernon Swinburne, Edgar Allan Poe, Joris-Karl Huysmans, to list but a few, are synonymous with the fetish of, and fascination with, death.

The artist’s spiritual twin is the vampire. Once you have “touched the flame,” there really is no turning back. The appetite for oceanic bliss only grows with time. Like Faust, like the vampire, the artist has sold his soul for an eternal life that seems abhorrent, inhuman, and freezing cold to the touch. Perhaps art conquers death by living on in the minds and hearts of those who follow.

Why has orgasm been described as “la petite morte” (“the little death”)? The surrender of the forebrain

(=ego), the letting go of the survival/vigilance/hunting and gathering functions, is common to artistic achievement – and is also a necessary ingredient of great sex, intense physical activity, and deep meditation.

Unlike our puritan clinician promoting bland living, good morals, right living, and squeaky clean fingernails, some consider the pursuit of oceanic bliss a core human drive. The fusion of protons releases thermonuclear energy. The single-minded pursuit of oceanic bliss, to the exclusion of all else, can also be monstrously destructive (when it takes, for example, the form of addiction, incessant exercise, or incessant *anything*).

Fusion? Hydrogen bombs? What do they have to do with rock music and catastrophe and death?

Rock & Roll

Rolling Stone magazine, reporting on the contemporary musical scene for more than four decades, has from time to time published roll calls of the “greatest” guitar players, blues players, and rock musicians of the century. A moment’s glance at any of these makes it plain that this craft is, to put it mildly, *dangerous*. The life trajectories of the greats (such as Jimi Hendrix, Brian Jones, Duane Allman, Jim Morrison, Lowell George, and others) are absolutely rife with disaster. Most of the top blues players of the twentieth century (60% or more) died young and died tragically, victims of violence, fatal accidents, and of alcohol/drug overdose.

The conditions of death, dismemberment, disaster, and all out alcohol and drug dependence are present among these players more often than not. Many of the players’ biographies read like eulogies, like body counts in an invisible and endless war.

For the sake of brevity – but also for shock value – I will describe the amazing parallels of mischance in the lives of four widely known musicians (three of whom are very much alive!). Each spent his formative years, creatively speaking, in electric blues bands. Each has been considered “the greatest” blues guitar player of his time. One – Eric Clapton (vide infra) – provoked hysterical fans to spray paint walls with the pronouncement, “Clapton is God.” Each is British, each began their meteoric careers in John Mayall’s Bluesbreakers, and to a man each went on to even greater celebrity with groups like Fleetwood Mac and the Rolling Stones.

Two of the three became (for a time) drug devotees; the other fell prey to psychosis. Even more

extraordinary, each had the staying power and resilience of spirit to overcome his demons and to return to the world stage, where each always belonged.

Robert Johnson

No discussion of deals with the devil would be complete without mention of the original blues genius, Robert Johnson.

Johnson was a laborer in the cotton fields of the Mississippi delta during the second and third decades of the twentieth century. He was also (and certainly not by choice) a myth-maker. The tradition of “you’ve got to pay your dues to play the blues” began with Johnson.

Do you have to suffer to play the blues? What’s up with that, anyway? It’s a tragic tradition that goes way back. Johnson’s lyrics are comic, tragic, and utterly transparent. Johnson was a womanizer, too.

Many people really believe that to make it big, you must sell your soul to the devil. The legend goes like this: Johnson met up with Satan at a country crossroads at midnight and made a deal. In exchange for his immortal soul, Johnson would (for a very short time, as it turned out) be the greatest blues player in the world. Listening to the scratchy primitive recordings that survived, the legend seems less far-fetched. Johnson worked the guitar strings like three virtuosos playing at once. Many Johnson tunes became hits (and then standards) for world famous rock bands like Cream and the Rolling Stones.

The man had hell to pay. When he wasn’t working, he was playing, and much of the time he was living hard and fast and dangerous. Johnson was a handsome man, a drinking man, and his appetite for women didn’t discriminate between those already spoken for and those who were not. Within 2 years of achieving local fame, Johnson was fatally poisoned by a very angry, very jealous husband.

The idea that extraordinary artistic talent and success come at a high price is not new. The medieval playwright Christopher Marlowe’s character *Dr. Faustus* was the prototype of the artist in search of perfection – no matter the price. In more recent times, music (especially blues music) lovers still lower their voices whenever the name Robert Johnson comes up.

The songs were deadly serious – these are songs about love, loneliness, sadness, and pain – but that didn’t stop Johnson from poking fun at himself and this doom-ridden world. Christopher Marlowe,

Thomas Mann, Robert Johnson: three men who at least on paper were galaxies apart.

Still, it is easy to imagine the three nefariously communing around song.

The curse didn’t stop there. Art and doom have remained coevals right up to this day. The death or dissipation of *many* (former) key associates of the Stones is not the stuff of legend – it is a fact. Brian Jones (the first of several guitar players to “pass through” the band) died violently, mysteriously. Thirteen years ago, Eric Clapton’s toddler tumbled out of an open window of a Manhattan high rise to his death. And the list goes on: Janis Joplin, Mike Bloomfield, Gram Parsons, Stevie Ray Vaughan, Kurt Cobain, Lowell George...

Eric Clapton

Most people old enough to remember have their own stories of joy, nostalgia, horror, and extremity about the late, great “sixties.” The end of the seventh decade of the twentieth century was a kind of Rabelaisian tempest, or perhaps feast, an international transcultural carnival where everything exploded at once. Although no single event or personality was to blame, the rock and roll heroes of that time certainly took center stage. (Which was more compelling: the Stones’ epochal album *Let It Bleed* [Rolling Stones, Decca Records, 1969] or the astronauts on the moon?)

EC was right up there. After deciding that his mentor – John Mayall – and Mayall’s tyrannical adherence to the three-chord melodic structure of blues was too limiting (for him, that is), Clapton moved on. His next venue, a three-man band called The Cream, created an international stir and a taste for a very new kind of music. The tunes were recognizable, very basic: Cream’s melodic structures were often even simpler than the blues. At the heart of these performances were the virtuoso’s (very) extended solos. On stage, Clapton and cadre used the recorded material as launch pads for other-worldly, often brilliant, improvisations that dipped up, over, sideways, and down. At the heart of these performances were the extended solos, sometimes lasting an hour or more, that each player took. During these, the band – their hearts and spirits “in the pocket,” their souls at peak flow – weaved complex tapestries of super-amplified freefall through fantasy realms of minor and major and most everything else in between scales. (During one interview, Clapton described these forays as musical highwire

acts often fueled by LSD. Specifically, he noted that he felt “evil” when lapsing into a minor chord pattern or scale; he felt at peace when returning to the land of the major scale.) This kind of experience, for him and other musical champions of the era, was nothing out of the ordinary.

Spiritually, Clapton’s experience in Cream was compelling. How does a human brain create cogent and complex and brilliant art, while traversing a landscape of melting forms and unbidden synaesthesiae? The explanation is not readily forthcoming. Historical parallels certainly exist: da Vinci noted in his journals that he often hallucinated complex figures and beings by continuous staring at highly grained pieces of wood. Perhaps unhinging the doors of perception is the preamble to a dance with “Mr. D.,” Old Nick himself.

This is where the mysteries, allusions and scandal come full circle. Recall the terrain of the still unexplained miracle of Robert Johnson’s delta blues: a dark and desolate crossroads, always at spiritual nadir in the middle of the night. This is where the deal-making, the signing of blood pacts, takes place. Johnson’s tunes all gave witness to dark, grave proceedings.

Throughout his musical career, playing in different bands at different points in time, EC paid homage to these tunes. Many fans consider Clapton’s rendition (on Cream, *Wheels of Fire*, Polydor Records, 1968) of Johnson’s *Cross Road Blues* (Robert Johnson, Vocalion Records, 1937) to be one of the supreme examples of guitar virtuosity.

How long can a brilliant flame burn? During Clapton’s decades’-long reign (an arbitrary designation, since he continues to play to adoring audiences around the globe), parties and drugs and many thousands of altered “states” danced in tandem with EC’s guitar. He took most every drug around yet had a very long and productive run. Eventually, however, he seemed to tire of occupying that center panel of the Brueghel triptych and he literally slowed down. Musically, after 4 or 5 years with Cream, his taste and artistic requirements changed again. Cream disbanded, but Clapton played on, his records still selling by the millions. His work took on a distinctly more traditional sound. He was tired of the pandemonium and he wanted to play songs, wanted to play ballads, wanted to turn down the heat.

Rather than disinter and rehash biographical information that has been covered in great detail elsewhere, this monograph will explore and emphasize

the musicological (“pyrotechnical”) and consequent artistic and spiritual dimensions of this “holy trinity” (Eric Clapton, Peter Green, and Mick Taylor).

Eric Clapton was born and educated in England. Clapton did not meet his biological father until he was 30 years old. Like the other British musicians discussed here, EC was socioculturally poised for the life of a skilled laborer, or, failing that, for a working class life. Instead, in the years that followed, Clapton became one of the greatest if not *the* greatest electric blues player of all time.

It is tempting but perhaps specious to speculate how Clapton’s life turned out the way it did. No doubt part of the explanation was Clapton’s seething ambition to succeed at his art.

Clapton’s earliest visible years, as he moved from one band to the next – usually as the showcased player – were already rife with hints of the success and virtuosity that lay ahead. The mysterious quantum leap from the Ripley teenager who went on to achieve world musical fame remains a puzzle. What is perfectly clear, however, is that this young man practised his music steadily, doggedly, honing his musical ear and tormenting his bleeding fingers mercilessly during many thousands of intensely driven hours of practice. While most of us recall our youth as a time of exploration, a phase of quick nervous forays from one new thing to the next, it seems that Clapton single-mindedly devoted his formative years to learning the blues. His study of music was extensive; he describes listening to endless collections of discs, recordings of Mississippi delta players, Chicago blues masters, folk guitarists, jazz players – absorbing the spirit and technique of any genre or player who touched his creative core.

The early 1960s, particularly in England, were an exciting time for emerging young musicians. First, the sentimental and often spiritually banal artists and songs of the previous decade were on their way out, replaced by a new generation of players and bands who believed in their hearts that their mission – to capture and convey the essence of a largely overlooked musical tradition (American blues) – was for all intents and purposes a *holy* one. Mayall, for example, titled the second Bluesbreakers album “Crusade” (John Mayall & the Bluesbreakers, *Crusade*, London Records, 1967).

Further, the instruments themselves had greatly changed. While acoustic guitar remained prominent in pop music, the newfangled thing – a guitar of solid

wood, equipped with two or more microphones (“pickups”) that amplified the strings – opened up new worlds of sound for players. These were sounds that had never been heard before. Thanks to the efforts of guitar makers like Leo Fender and Stanky Gibson, players like Clapton could turn a gently weeping note into a wall-shaking thunderclap at the turn of a dial or the slash of a guitar pick.

Early on, EC played “riffs” that were recognizably *his*. His playing, while touted for its seemingly inhuman speed and accuracy, was most notable for its gorgeous and passionate “feel.” EC, as the saying goes, “had the touch.” He often put his personal stamp on a solo by somehow intuiting the exact moment in a passage when extra volume or muting or a moment of electronic feedback would be absolutely “right.”

Clapton chronologies are widely available. His first internationally known band was the YardByrds, a five-man “combo” that interpreted and put rocket fuel into the music of their heroes – Muddy Waters, B. B. King, Elmore James, among others. The YardByrds, like the Mayall outfit, also became a graduate school of sorts for artisan-grade guitar players. Clapton was ultimately replaced by other brilliant players, guitar gods like Jimmy Page and Jeff Beck (each of whom went on to world-rocking careers; their recordings and concerts still ignite the hearts and gonads (!) of fans the world over).

Another intense personality of the time – John Mayall – made musical history by recruiting EC into his squad of dedicated British bluesmen, John Mayall & The Bluesbreakers. Mayall, like Clapton and the other artists under review, was a devoted if not fanatical student of American-based blues. Mayall’s record collection was a bluesman’s Library of Congress; to his further credit, Mayall loaned discs from his priceless collection to players he considered dedicated, like himself, to the artistic and spiritual challenge of the blues. If you worked for Mayall, you didn’t do much else. Mayall was obsessed with his work, and he insisted that his players work and always do better according to his empyrean standards. The Bluesbreakers, featuring Clapton, flourished between 1965 and 1966. The band toured widely, and sleeplessly, to the growing acclaim of hundreds of thousands of fans – fans who had never heard this kind of music before. The best known recording, *The Bluesbreakers with Eric Clapton* (Decca, 1966) is a sacred relic among fans. Collectors and Clapton cultists have been able to salvage a number of archival tracks, including out-takes,

rare sessions with other players, and the like. But the total collaborative musical output was, many feel, never enough.

What was so special about EC and his playing? His intensity, in both appearance and musical sensibility, and in the way he handled the guitar – all these were very special. Much of the rock music of the time was easy to listen to – and just as easy to forget. But very few players crafted a twelve-bar blues solo in the same life or death manner that Clapton did. Armed with his Gibson Les Paul (a guitar that soon became the “hammer of the gods” among players and enthusiasts), Clapton attacked his solos with a vengeance, with a heartfelt ferocity that was at once primal *and* technically flawless. For EC, bending a note was never a casual thing; every note, every bend, every inflection, had its deadly serious purpose. A personal favorite is the soul-piercing solo EC takes on Mayall’s version of “Have You Heard” – a slow and majestic slow blues that unflinchingly builds from the first opening note to the orgasmic burst of notes at the very height of the solo.

Afficionados of other musical genres (such as opera or jazz) can relate to the superlatives and apostrophes that are enlisted in any serious attempt to describe this music in words. Lovers of opera, of symphonic orchestra, use similar language when attempting to describe peak moments of their treasured music. Although electric blues seems at quite an aesthetic distance from the work of Verdi, Mozart, and Puccini, both forms capture the spirit and express the passions of the human heart with equal intensity, fervor, and majesty.

Clapton’s time with Mayall was a tiny blip – a flea on an elephant – compared with what was to come. Clapton told reporters that he felt hemmed in, limited, by Mayall’s tyrannical devotion to the blues – blues, more blues, and nothing but the blues! Deviations from the genre? In Mayall’s band, there was no such thing. Either you loved the blues or you left.

Clapton chose to leave.

EC rising

Signing a pact with the devil is not light opera. Even the saddest and sorriest “bottoms” that seasoned clinicians encounter over the course of a busy career pale in comparison to the life-changing horror that could have swept Clapton completely away. Recent biographies, including those of Clapton (2007), Marianne

Faithfull (2000), and Patti Boyd (2007) document the gory detail of EC's drug abuse years.

The absolute nadir, however, must have been his 4-year-old son Conor's fatal fall from the 53rd floor of a midtown Manhattan high rise in 1991. The closest we can get to that experience is the horrifying narrative of Adrien Leverkühn, the fictive Beethoven in Thomas Mann's *Doktor Faustus*.

That's when EC turned his life around. His soul and his music softened, became humble, and many of the songs from this period are filled with an almost intolerable freight of sorrow.

Clapton's story, a model of human endurance and courage, continues to this day. Perhaps the absence of a father steeled him for what was to come.

EC began to prefer playing unamplified ("unplugged") guitar. He also founded a toney rehab program in the Caribbean. Clapton's most recent work – his acoustic interpretations of Robert Johnson – will easily rise to the top of the canon and resist erosion by the mournful friction of time.

As Clapton sweetened his music – and frustrated countless fans by holding back the banshee attacks and fighter jet solos – he became more thoughtful, more open, and generally more remorseful about his drinking, drugging, and womanizing ways. His recent autobiography (Clapton, 2007) reads like a puritan's travel guide to the bars, clubs, and concert halls of his past: there is minimal mention of the chemical extremes, of the drug-primed bacchanals of his earlier days. Clapton went in and out of collaborations with various musicians whose sensibilities – and talent – diverged, sometimes greatly from his.

Then everything came to a halt. "Mr. D." came to collect his due. Clapton's 4-year-old son fell to his death from a Manhattan high rise.

EC had already embraced sobriety. Now he was really done. Too many things had gone out of control. Clapton toned down his look and he toned down the music. He began recording ballads – many from the Robert Johnson songbook – on an acoustic guitar, sans band. Now he produced very mournful, very elegant lieder, songs about his absent father and his lost son. These songs are painful: they are sweet, lugubrious, and overwhelmingly sad.

Those with grit and intestinal fortitude can handle the jeroboams of sorrow packed into these songs. In one song, Clapton mourns the father that, as a child, he never knew.

In real life, EC didn't get to look into his father's eyes until he was 30 years old. Yet the song succeeds brilliantly at evoking both the joy and the sorrow of having no one to show you the way. The death of Clapton's 4-year-old son Conor may have been EC's final payment to the Great Deceiver. Perhaps Satan and his minions have stopped knocking on Clapton's door, evermore.

The supernatural

Similarities, strange coincidences, parallel universes, doppelgangers, synchronicity...Peter Green, another young working class Englishman, signed on with John Mayall's Bluesbreakers the moment Clapton left.

Born Peter Greenbaum, son of an English butcherman, PG – like his predecessor in Mayall's "college of electric blues" – was an autodidact who devoted his adolescence and young adulthood to a steady diet of study, practice, and playing the blues. Rarely was he seen without guitar in hand.

His ascension to the very "top of the pops" ran the usual (usual for emerging superstars, that is) obstacle course of short-lived engagements and gigs in the highly incestuous world of English blues players, pubs, and clubs.

During his pre-Bluesbreakers period, Green (with great trepidation) watched Clapton perform; not only was the Les Paul guitar on fire – but Clapton's singing was awesome, too!

Undaunted, Green played on – and his success took him down a hard and rocky road.

A *Hard Road* (John Mayall & the Bluesbreakers, Decca, 1967) was the second Bluesbreakers album, Peter Green at the helm. The recording features the identical twelve-bar blues structure, scales and fingerings that Clapton used. None the less, Green's sound was totally unique.

Green and Clapton even used the same equipment, early model Gibson Les Pauls. But the sounds each achieved were worlds apart. On guitar, Green could twist a note, bend it and turn it, and then sustain it for what sounded like forever.

Green's sound: that of a high voltage shaman, an oracle, launching fire and brimstone portents from the Dark Side. Green's preference for minor seventh chords explains some of the uncanny sounds he achieved. The technical aspects of his playing, such as his use of reverb and extreme sustain effects, do not fully account for the music's power. Green's instrumental and vocal

magic bore witness to his personal crucifixion in strange and unearthly realms.

All told, Green did one album with the Bluesbreakers; this album, *A Hard Road*, is a masterwork of the genre. The guitar sound is unmistakable. Each passage – the solos in particular – rises and then falls from astonishing heights of passion and brio. Further, Green’s signature “attack” sounds faster and more technically perfect each time you hear it.

One of the best examples of Green’s guitar is his instrumental, *The Supernatural* (on *A Hard Road*, op cit.). Even those sworn to scientism – card-carrying atheists, too – will hear shadow and séance and tenebrous possibility in the unforgettable two and a half minutes of this very strange song.

Mayall’s Schoolmen each went on to international recognition and fame. After Mayall, PG founded what was arguably *the* band of the era, Fleetwood Mac. Many “Mac” devotees are unaware of the band’s solid foundation (thanks to Green) in the blues. Again, the Peter Green tunes are crepuscular, other-worldly, and they begin to point toward his imminent collapse into apocalyptic and gnostic-type beliefs.

Green quit Mac at the height of its success. Pumping out one chartbuster after another, the young men of Mac were practically millionaires.

Green, already a mendicant in his mind (he wore long flowing garments, a long beard and a halo of unshorn locks, very much the latter-day Christ), then gave all his money away. Green the anchorite disavowed all commercial attachments and inducements and ignored the desperate pleas that he remain with Mac. He continued to write and play, recording a number of songs that became increasingly eccentric, almost messianic in tone.

Green had found God.

Then he disappeared. According to rumor, PG had joined a cult called The Children of God and had moved to Israel. The last album-length recording was a record aptly entitled *The End of the Game* (Peter A. Green, *The End of the Game*, Reprise Records, 1970). The album art (featuring a tight head shot of a ferocious tiger) very much matched the music within. The album tracks – instrumental forays into odd sound effects and melodic blind alleys – were disturbing and very different from anything PG had ever done before.

Decades later PG re-emerged, this time with a bona fide band (The Splinter Group), international

concert dates, and a more recognizable and more traditional sound. Green had wandered into stygian precincts, with LSD as his guide. Psychosis soon followed. His second coming, likely facilitated by psychiatric treatment, was a triumph and an inspiration.

Before his extended sojourn into mysticism and madness, he (yes, he too!) recorded an archival Robert Johnson tune (Robert Johnson, *Hellhound On My Trail*, Vocalion Records, 1937).

Michael Taylor

Michael (“Mick”) Taylor, the third panel of the metaphorical triptych, was the last superstar graduate of the Mayall/Bluesbreakers school.

Taylor’s profile will sound familiar: English, working class, intensely dedicated, aficionado of blues. In many photos Taylor is seen wielding a Les Paul. Unlike Clapton and Green, he stayed with the Bluesbreakers long enough to record at least three world-class LPs.

Taylor was 16 years old when he was recruited by Mayall. His sound – again, within the same melodic and rhythmic structure, the twelve-bar blues – was totally unique. Descriptions of his work capture elements but never the entirety of the sound. He perfected a finger vibrato style that took the instrument and its electronics to the peak of their potential. Further, he has been an acknowledged master of electric slide guitar. His sense of timing is simultaneously brilliant, surprising, and filled with passion. Taylor’s listeners continually react to his solos, almost by reflex: “*Of course, how could it be any other note but that?*”

It is unclear exactly how or why Taylor left the blues band.

We do know that he was drafted by The Rolling Stones following the drug death of their guitar player, Brian Jones. Taylor was with the Stones from 1969 until the mid-1970s. During this period the band astounded the world with one creative triumph after another. The recorded material was brilliant; the concerts are still talked about in hushed, devotional tones. On stage, Taylor took the Stones’ overplayed trademark tunes to new and exotic places. Taylor’s extended solos on stage were comparable in both majesty and invention to the sumptuous musical excursions of Ravi Shankar. In fact, Taylor often surprised and amazed listeners with forays into exotic “Far Eastern”-sounding intervals and scales. These extended passages were usually improvised; their spontaneity added to the musical power. Taylor’s guitar solo on *Sway* (Jagger/Richards and Mick

Taylor, from the album *Sticky Fingers* (Rolling Stones/ Atlantic Records, 1971) – 16 bars from start to finish – is one of the supreme guitar passages in rock and roll.

Are drugs bad? The challenge here is to consider the question from a non-dualistic point of view. The Stones' best album, *Exile on Main Street* (a double album, containing 18 original songs; Rolling Stones/ Atlantic Records) was recorded in 1972 at a rented chateau in the south of France. During their months-long stay, the band's unabashed drug consumption took on almost heroic proportions. None the less the Stones and their precocious virtuoso managed to craft music that was rapidly (and appropriately!) canonized. Some argue that creative triumphs sometimes occur *despite* the drugs.

Taylor did pay the devil his due.

His life and career took an extended nose dive, no doubt related to some of the appetites he had cultivated as a Stone. Taylor spoke of his drug use publicly and actually continued to perform and record during those difficult times. Taylor, like Clapton and Green, overcame his demons. The best part of the happy ending is that he is still out there, at the top of his spiritual form, playing out music miracles just like before.

CODA: how to treat VIPs

Everyone is a VIP, especially when they come to you for help. Individuals with damaged self-esteem (along with everyone else) should always be treated as VIPs.

Life and doctors and treatment programs, however, often fail to rise to this level of compassion.

VIP patients (celebrities, artists, musicians, actors, politicians, plutocrats) often have the following in common:

1. They expect (boundless) individual attention, unconditional love, and immediate gratification of expressed (or even covert) needs.
2. Substance use history is often marked by intake of massive and costly amounts of drugs and/or alcohol.
3. Substance use is not only condoned but actually encouraged by fans and those trying to gain entry to the Olympian social circle.
4. They are often irritable, and have intense feelings of both entitlement and self-loathing.
5. Self-regard roller coasters between heavenly aeries and self-created dungeons of despair.
6. They have been courted many times by healers and would-be miracle workers, so they are suspicious of any new Buddhas on the block.
7. They expect shallow superficial relationships; they often expect very little of others – “*everyone wants something from me.*”
8. Attempts at honest, direct communication may be perceived as more efforts to manipulate and to connive.
9. “The show must go on:” they *must* have their drugs because of a critically important rehearsal, performance, recording session, etc.
10. Often dismissive or suspicious of attempts to gather background information on family of origin, childhood, personal issues: “*Hey Doc, been there, done that...how many milligrams can you write me?*”
11. Beneath the bravado and the tough as nails exterior there is often an extremely fragile and sensitive soul, who over-personalizes events and behaviors, and reacts to even neutral content conversations as though being criticized or rejected.

On the other side of the smoking gun sits the therapist, who needs to monitor both the client–therapist interaction and his/her own feelings, which are also to some extent predictable:

- Why me? What makes him think I can possibly help him?
- He's got serious money, inconceivably more than I do. Which of us really needs help?
- With all that money, all that power at his beck and call, how can he possibly be so depressed/ messed up/self-destructive?
- He has no idea what real pain is about.
- How come he can get away with all this? Anyone else would be in prison by now!
- This person loves drugs. There's no way he's going to be interested in any meaningful change.
- I must have listened to his second album 400 times. Here he sits, in my office, asking for help. I used to worship this person!

And so it goes. Usually the second meeting is far more comfortable and informal than the first. It's probably helpful to back off on systematic information gathering during the first meeting, unless issues related to acute withdrawal or other potential medical crises are imminent. It's best when VIP and doctor can establish a relationship where each recognizes the humanity and (to some extent) the limitations of the other. More often than not the VIP is from New Jersey or Brooklyn, not Mount Olympus; although the clinician is rife with

diplomas, certifications, and academic honors, he too is a human being, a human being who will try to do his best by his patient but who is certainly not infallible, certainly not equipped with all the answers and quick fixes that his high roller patient wants. It's also helpful to spend some time trading life stories, so each gets to see the other as real, as capable – yet fallible, too.

So if and when the shade of Robert Johnson comes knocking on your office door, parchment and blood ink and wax seal in hand, find the nearest exit and head for the hills!

References

- Becker, E. (1972). *The Denial of Death*. New York: Free Press.
- Boyd, P. (2007). *Wonderful Tonight: An Autobiography*. New York: Random House.
- Butler, A. (1788). *The Lives of the Saints*, recent publication, New York: HarperCollins, 1991.
- Clapton, E. (2007). *The Autobiography*. New York: Broadway Books.
- Faithfull, M. with Dalton, D. (2000). *Marianne Faithfull: An Autobiography*. Princeton, NJ: Princeton University Press.
- Kierkegaard, S. (2009). *The Sickness Unto Death, first published 1843*. New York: Feather Trail Press.
- Mann, T. (1948). *Doktor Faustus*. New York: Knopf.
- Redfield Jamison, K. (1993). *Touched with Fire: Manic-Depressive Illness and the Artistic Temperament*. New York: Free Press.

The disease concept – controversies and integration

Mark Schenker

In no other area of research and social or medical endeavor have slogans so extensively replaced theoretical insight, as a basis for therapeutic action, as in alcoholism. The emotional impact of the statement, “Alcoholism is a sickness,” is such that very few people care to stop to think what it actually means.

Wexberg (1951), quoted in Jellinek, The Disease Concept of Alcoholism (1960)

There are few more controversial topics within the area of addiction treatment than the disease concept of addiction. This construct, or set of constructs, has been debated in the scientific literature for over a hundred years, and it remains a bone of contention between those oriented toward biological conceptions of addiction, and those preferring more behavioral or social explanations. The question of whether addiction is a disease or some other sort of entity has both theoretical and practical implications.

That alcoholism is a disease is an article of faith for those in Alcoholics Anonymous (AA); it is only secondarily that it is noted that this term is not used in the major works of AA (Alcoholics Anonymous, 2001). Bill Wilson, one of the founders of AA (and the primary writer of most of the early AA literature), consciously avoided using the word “disease” for fear of arousing controversy and a negative reaction from the medical profession; Bill used words like “malady” and “affliction,” less incendiary terms, instead. Interestingly, Bill did not spend a great deal of time in describing the nature or etiology of alcoholism, but was more concerned with the person of the alcoholic, and with the pragmatic task of recovery.

The closest the “Big Book” of AA (Alcoholics Anonymous, 2001) comes to defining alcoholism is in the preface, “The Doctor’s Opinion,” in which Dr. William Silkworth describes alcoholism as an allergy combined with a craving. For the majority of AA members this is all the explanation that is needed. For the more scientific-minded among us, this formulation is just the beginning.

For better or for worse, our common notion of the disease concept of alcoholism, and, by extension, other addictions, derives from the AA depiction. However, there are other sources for this formulation, and the history of the disease concept goes back much further than Bill Wilson or E. M. Jellinek. Benjamin Rush, a signer of the Declaration of Independence and a Philadelphia physician, is often cited as providing an influential early formulation of the disease concept. He published a pamphlet in 1784 which had an enormous impact on subsequent generations of physicians and thinkers in the field (White, 1998). While he concluded that alcoholism was a disease, he vacillated between describing its origins as psychological or biological in nature. In either case, he advocated abstinence as the only resolution of alcoholism, once it had developed.

Models of addiction

To fully understand the radical departure of construing addiction as disease, it is useful to place this view in the context of other perspectives on addiction (Rogers & McMillin, 1988). The “moral models” are the early alternatives to the disease concept. The moral model views addiction as primarily a moral issue. The abuse of alcohol in general, much less the habitual abuse of it, is seen as emerging from personal preferences and poor moral choices. In one variant, sometimes termed the “wet moral model,” alcohol itself is seen as the culprit – alcohol is inherently evil and will corrupt, sooner or later, anyone who uses it. Any use of alcohol is bound to result in a bad outcome for the user, and for those around him. The logical alternative, from this perspective, is the total prohibition of alcohol; the grand experiment of the 18th Amendment to the US Constitution is the clear result of this kind of thinking. The “dry moral model” sees the problem as the inappropriate and unmoderated use of alcohol; the fault lies in the moral failing of the person who uses alcohol

recklessly and intemperately. For these adherents, alcohol must be used moderately or not at all; abuse represents poor moral fiber.

Before we dismiss these models as whimsical echoes of the past, it is important to note that these views underlie some of our current approach to our drug problem. The criminalization of drug users, the logical outcome of the “war on drugs” which we’ve been waging since the 1980s, represents the categorization of the problem as a legal and moral issue, not a medical one (Humphreys & Rappaport, 1993).

The mid 20th century saw the advent of psychological models of addiction, spurred by both Freudian and behavioral psychology. The most common formulation of this model centers on the idea of the “addictive personality.” This construct presumes that underlying personality dynamics form the core of addiction. Such characteristics as immaturity, impulsivity, inability to delay gratification, selfishness, and lack of conscience are part of this presumed personality formation. The analytic formulation of addiction as a regression to a more primitive state, whether to an oral fixation or further back, is a clear example of such thinking. It is notable that as recently as DSM-II, alcoholism was classified as a personality disorder (American Psychiatric Association, 1968).

However, empirical support for an addictive personality has been sparse (Vaillant, 1995). This theory has eroded not only because the support for the construct has not been forthcoming, but because the treatments based on it have not been fruitful. It has long been accepted that psychoanalysis and psychodynamic therapy have fared poorly in studies of effectiveness with this population. However, this has not stopped many members of the public, many addicts, and many professionals (e.g. Melzack, 1990) from invoking it regularly as an explanatory vehicle. Dodes (2002) provides an example of a “new” approach to a psychological interpretation of the issues underlying addiction.

A second stream of psychological models flows from behavioral psychology. Whether through strict operant principles or social learning theories, addiction is depicted as primarily a phenomenon of learning and conditioning. Studies of “expectancies” as well take a cognitive behavioral view of alcoholism and addiction.

In the 1970s, “family systems models” appeared to be a more progressive approach to understanding and treating addiction (Stanton *et al.*, 1982). Rather than locate the addiction within an individual, the addic-

tion was placed in an interpersonal context, one with powerful resonance. “Addiction is a family disease” became a popular phrase in addictions treatment centers, and renewed efforts were made to engage families in treatment. There were several variations on this theme. For some, “family disease” simply meant that all members of the addict’s family were affected and merited therapeutic attention. For others, behaviors of family members were assessed to detect causative factors, or reinforcing variables. The “new” model of family therapy was also available as a novel approach to treating addiction, and several different schools of family therapy were applied to deal with drug and alcohol addictions.

Like the fable of the blind men and the elephant (each one giving a different description based on the part he happens to be touching), each of these theories yields valuable perspectives, yet none is fully explanatory of the complex behavior of the addict or alcoholic. Despite debate about which of these perspectives is the most valid for understanding the self-destructive compulsions of the alcoholic or drug addict, it is clear to me that the only way to explain this phenomenon is by pulling each of these theories into a comprehensive integrative framework.

The disease concept

A fundamental assumption of the classic disease concept is that addiction is a clearly delineated illness, defined by specific symptoms, and following an identifiable course. The idea of alcoholism as a disease centers on these primary symptoms (Milam & Ketcham, 1981):

- Loss of control over one’s consumption of alcohol
- Physical dependence
- Elevated tolerance
- Organ damage.

These symptoms form the core of the criteria for substance dependence found in the DSM-IV (American Psychiatric Association, 2005). The identifiable progression of the disease has been portrayed in the famous “Jellinek Chart” presented in Figure 2.1 (which was not actually developed by Jellinek, but was named in his honor).

A modern refinement of the disease concept sees this illness as founded on physiologic dysfunction, primarily dysregulation of neurotransmitter systems (Erickson, 2007). Although several different systems

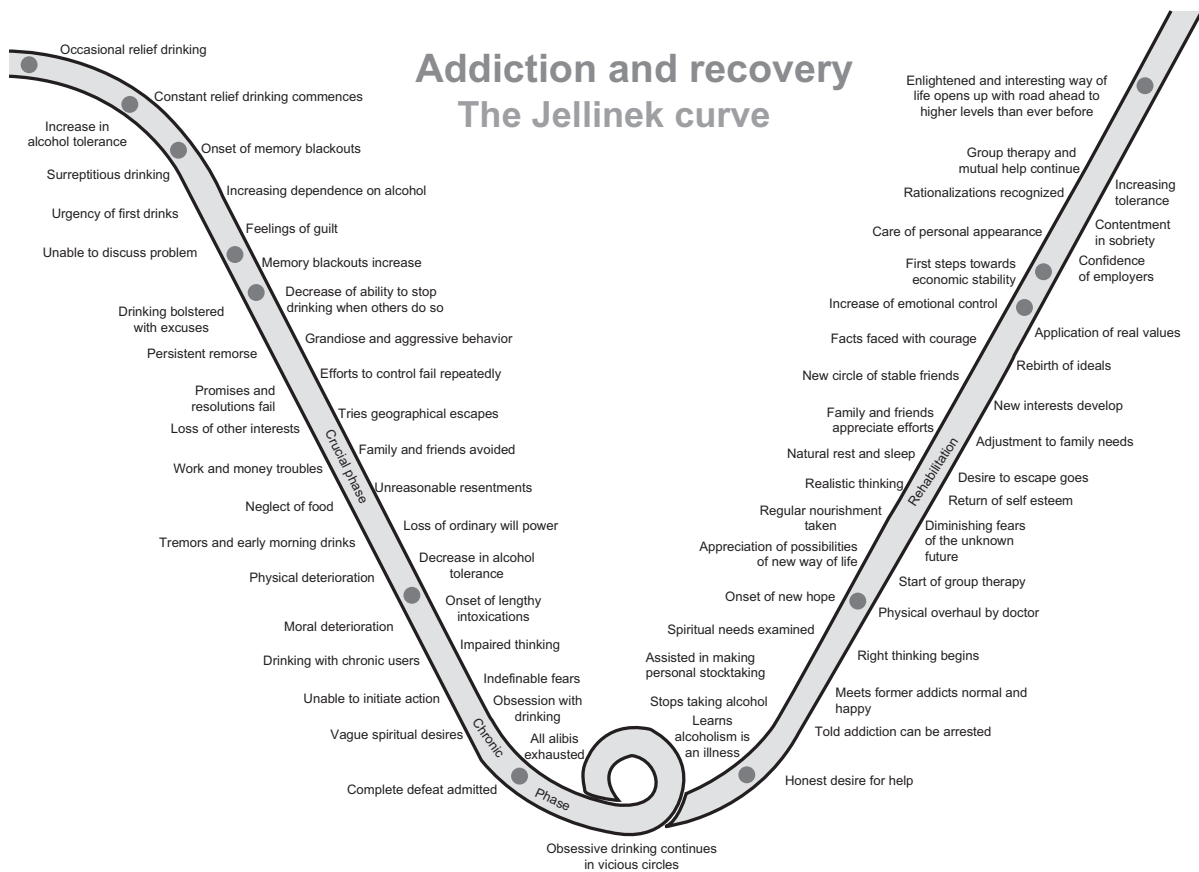


Figure 2.1 The Jellinek Chart.

have been proposed, there remains a lack of consensus about which system (endorphins, serotonin, GABA) is the primary culprit, and it is assumed that further research will clarify this picture. It may be that there are several variant “diseases” each with somewhat different characteristics. However, overall, this position is best expressed in NIDA’s catch phrase, “Addiction is Brain Disease.”

Addiction as brain disease, however, carries several limitations as a full explanatory system of addiction. For one thing, it is quite weak in explaining the persistence of addictive behaviors and craving beyond the period of detoxification. For example, why would someone return to drug use after detox, knowing that it results in misery? Even more puzzling, how are we to explain the relapse to full-blown substance abuse of an addict whose 15 years of sobriety have yielded a satisfying drug-free lifestyle? For another, many of the behaviors and attitudes which underline and maintain

addiction are difficult to explain merely on the basis of a sensitivity to substances of abuse.

Furthermore, the articulation of the disease concept has been marred by a kind of imprecise thinking that allows a wide variety of viewpoints, and has yielded a lack of consensus in the field. This has resulted in dissection of the word “disease” (at one extreme, an interpretation of alcoholism based on the “dis-ease” or discomfort of the sufferer) and the word “concept” (if this is merely a heuristic device, or a metaphor, the need to validate it becomes less pressing).

In keeping with the spirit of the twelve-step fellowship, many writers have simply treated the disease concept as a given, as a postulate which needs little defining. Many writers in this area appear more concerned with describing the characteristics of the addict or alcoholic, and have bypassed defining or explicating the exact nature of the disorder. As a result, the concept remains vague and undefined.

Major contributions to the disease concept

Two seminal sources in defining the disease concept are the work of E. M. Jellinek and George Vaillant.

Jellinek is famous for writing the first fully developed review of this topic, *The Disease Concept of Alcoholism*, in 1960. William White (1998) has written that this book “remains one of the most frequently cited and least read books in the alcoholism field” (p. 215). Much of the subtlety of Jellinek’s work has been lost in subsequent generations, who have adopted the phrase “disease concept” from the title without noting the important distinctions that Jellinek draws in the pages of the book.

Jellinek provides a comprehensive review of a variety of theories of alcoholism, including psychological, metabolic, economic, cultural, and public health perspectives. He emerges with the view that none of these points of view are sufficient to explain the phenomena of alcoholism completely. Psychological explanations, for example, can explain the initiation of alcohol intake, but not the subsequent progression of the disease. Biological theories (whether posited on endocrine, metabolic or nutritional mechanisms) are weak in explaining the etiology of the disorder. His own integration suggests that the initiation of heavy drinking is determined by psychological factors, but “later a physiological X factor accounts for a disease condition outwardly manifested through loss of control” (p. 84). The nature of this “X factor” remains controversial, but more is known now than in Jellinek’s day.

One of the more robust findings drawn from Jellinek’s work is his identification of several subtypes, or “species” of alcoholism. Primary among these are his distinctions between alpha alcoholism, gamma alcoholism, and delta alcoholism. Alpha alcoholism is defined as a psychological dependence on alcohol, possibly to relieve psychological symptoms. Gamma alcoholism is characterized by the phenomenon of loss of control – the patient may maintain sobriety between drinking bouts, but cannot control his intake once he starts. Delta alcoholism is sometimes referred to as “maintenance drinking” (Milam & Ketcham, 1981) – the patient exhibits physical dependence and elevated tolerance, but no loss of control. His pattern consists of an inability to abstain, but he remains within limits defined by inebriation and withdrawal. Two other types, beta and epsilon alcoholism, are encountered less frequently and are not often discussed.

Two significant implications emerge from Jellinek’s conceptualization. First is the idea that alcoholism may not be one unitary entity, but may consist of separate subtypes, which follow different patterns. (It may be possible, in the future, to identify different subtypes of alcoholism based not on behavioral criteria, as Jellinek did, but based on the neurotransmitter systems involved.) The second is Jellinek’s contention that only two of these subtypes (gamma and delta) met his criteria to be categorized as diseases, in that the physiological aspects of addiction were clearly present in these two species. In this perspective, not all problem drinkers are alcoholic; this term is limited to the two varieties that provide evidence of physiological adaptation.

George Vaillant (1995) has a unique vantage point from which to assess alcoholism. He inherited several large datasets, begun in the 1940s, including a set of Harvard undergraduates and a set of Boston inner city youths, all white males. By following these subjects prospectively, he has been able to infer premorbid characteristics of those who developed alcoholism rather than suffer the limits of retrospective study. Subsequently, he has been able to follow some of these men for a period of 60 years (Vaillant, 2003), truly a unique situation in virtually any area of psychological research.

Vaillant (1995) reaches conclusions that agree with Jellinek in some aspects, but differ in some significant ways. Vaillant concludes that alcoholism “can simultaneously reflect both a conditioned habit and a disease” (p. 376), and that, rather than viewing it as consisting of subspecies, construes it as existing along a continuum. For Vaillant, alcoholism is defined by the number of problems it creates, not necessarily by a set of specific symptoms. Vaillant views alcoholism as occurring when the patient crosses a vague, but real, line. Once it has developed a life of its own, it becomes a chronic disorder, functionally autonomous from the conditions that may have created it. Vaillant’s conclusion is that much of the behavioral and psychological problems that we generally associate with alcoholism are caused by this disorder; he does not find any significant evidence of premorbid psychological factors distinguishing between alcoholics and non-alcoholics.

Vaillant (1995; 2003) provides insight on several other areas of alcoholism, not directly related to the topic at hand. One relevant conclusion is that the disease of alcoholism may not be as progressive as

Jellinek (1960) or Alcoholics Anonymous (2001) has assumed; many of the men he studied (Vaillant, 2003) were able to sustain problem drinking for extended periods of time without progressing into more severe addiction. Furthermore, he concludes (1995) that the chances of a return to asymptomatic drinking decrease the further along the continuum the patient is.

Critiques and limitations of the disease concept

Of course, there have been significant critiques of the disease concept. Fingarette (1988) has provided one of the more coherent and significant challenges. A primary target for Fingarette is the phenomenon of loss of control, an essential element of the disease concept. He views this as a flawed assumption, and one that some research appears to invalidate (e.g. Marlatt *et al.*, 1973). Methodological limitations of the Marlatt study are not discussed, and the more nuanced disease model proposed by others is dismissed.

Another significant critique of the disease model by Fingarette, one shared by Stanton Peele (1989), is a moral one. These writers feel that the categorization of alcoholism as a disease allows patients to avoid responsibility for their disorder. Rather than face their disorders constructively, this label allows them to assume a passive “victim” stance.

This critique appears to have a strong emotional resonance, but it is a clear misunderstanding of the actual practices of those working in an active recovery program. The assumption of responsibility for one’s own recovery is an inherent part of the program of AA, and is reflected in several of the Steps and Traditions of AA. Fingarette argues that AA’s insistence that alcoholics are “powerless” encourages them to avoid responsibility. Vaillant (1995), in response, argues that “alcoholics who label themselves ill – and not bad – will be less helpless;...they, like diabetics, and in contrast to pickpockets, will try harder to change and to let others help them to change” (p. 378).

Peele (1989), a prominent critic of the disease model, views addiction as a matter of values. In his view, people suffering from addiction are lacking in more rewarding and meaningful life activities. As I have pointed out elsewhere (Schenker, 2009), it does not take a great deal of clinical experience to encounter patients whose lives would be entirely fulfilling and productive, if not for the destructive effect of addiction in their lives.

Both Peele (1989) and Fingarette (1988) point to strong economic incentives to endorse the disease concept. In Fingarette’s case, the alcohol beverage industry has an interest in ensuring that the locus of the problem is to be found in the individual and not in the product. For Peele, the addiction treatment business is apt to label all sorts of aberrant behaviors as diseases worthy of treatment, which he characterizes as a lucrative industry. These criticisms may have more merit than the attacks on the disease concept themselves.

An integrative model

Given these concerns and viewpoints, I’d like to present an integrative model of addiction that serves several purposes. First, it helps to reconcile the various schools of thought that have struggled with the nature of addiction. Second, it works through some of the semantic difficulties that plague this field. Third, it provides a level of understanding of the phenomenon that can help inform and direct treatment efforts.

In some recent literature, addiction has been described as a “biopsychosocial” phenomenon. This model begins with that assumption, while teasing out more subtleties and specifics and adding other dimensions.

To present this model, I refer the reader to [Figure 2.2](#). This model construes the disease of addiction as comprised of several layers of concentric, cumulatively reinforcing, variables. The outer layers serve to reinforce the conditions set up by the inner layers, although there is considerable reciprocal interaction between levels of the model. We will begin by describing the model from the innermost level, biological factors, moving on to the outer levels, involving cultural and existential dimensions. I will use alcohol as my primary focus, given the relative abundance of research in this area, but will highlight other relevant issues as well.

Biological factors

The model begins with processes of biological adaptation and with physiological reactions to alcohol. Examining this level is instructive, and basic to understanding the role of the subsequent levels of reinforcement. Studies of adopted-out twins provide evidence that the phenomenon of alcoholism is significantly mediated by genetic factors (Goodwin, 1988). However, they do not identify the mechanisms of such intergenerational transmission.

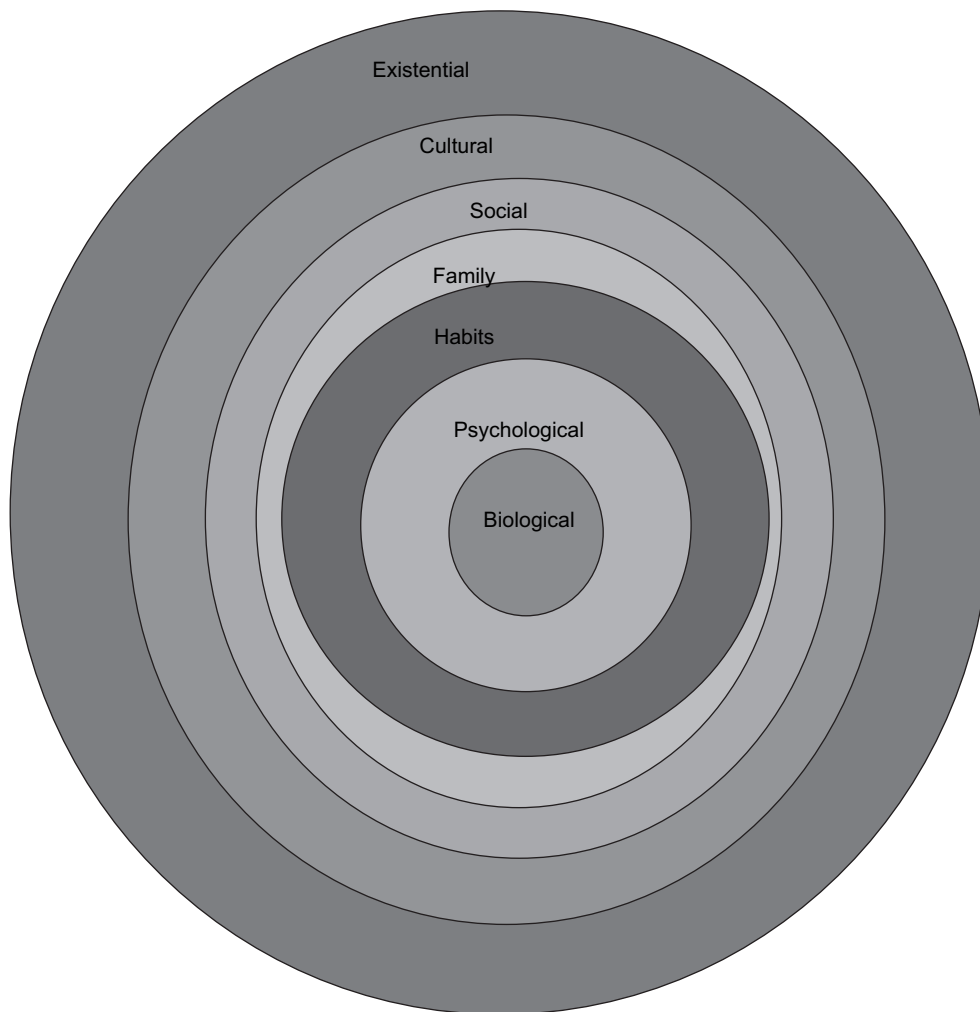


Figure 2.2 An Integrated Model.

The biological factors involved appear to be the same three criteria cited in the DSM: physical dependence, elevated tolerance, and loss of control.

Tolerance

Physiological and psychological markers of adaptation to alcohol are present in the sons of alcoholic fathers even prior to the onset of alcohol problems (Schuckit, 1988). Furthermore, these signs, particularly early evidence of alcohol tolerance, appear to predict the subsequent onset of alcoholism (Schuckit, 1994).

The phenomenon of elevated tolerance appears to be an early warning sign of the presence of alcoholism. The experience of rapid development of tolerance is also clinically observed in many alcoholics. This may

be one of the key signs in adolescent substance abuse that allows us to distinguish between alcohol dependence and more typical adolescent misuse.

Dependence

One's vulnerability to alcohol dependence, one factor in the *diagnosis* of alcohol dependence, also appears to have physiological and genetic roots. Studies of other mammals suggest that this vulnerability is both heritable and selective – not everyone who is exposed to alcohol, even over extended periods of time, will become dependent on it. It is interesting to note that of the many American soldiers who became addicted to heroin during the Vietnam War, the vast majority gave it up upon their return to the United States and to more normal living (Stanton, 1976).

Loss of control

This appears to be the defining characteristic of addiction, which may even occur in the absence of the other two primary symptoms. This has been compared to the behavioral phenomenon of eating potato chips – once you start, it becomes difficult to stop. The AA saying, “One drink is too much and a thousand isn’t enough” seems to capture this experience.

Perhaps the essence of the disease concept can be found in this one factor. Loss of control over substance use has been recently shown to be regulated by specific brain circuits involving pleasure centers in the brain (Baler & Volkow, 2006; Erickson, 2007). Increased sophistication in brain imaging techniques and similar diagnostic procedures have given us more evidence that, at least at this level, addiction is, indeed, a brain disease.

The limitations of utilizing dependence as the primary factor in diagnosing alcoholism or substance dependence is revealed in reviewing data of those who are prescribed painkillers or benzodiazepines, both readily addictive to certain people. Only a small proportion of those prescribed benzodiazepines become dependent on them. Many people become dependent on opiates for pain control, may even develop some degree of tolerance, yet never lose control of their use, and we do not think of them as addicted. The centrality of loss of control in determining the nature of addiction becomes clearer in this context.

It is also clear that these three factors underlie all behavior that will meet the criteria for substance dependence, and that all three are physiological in essence. However, as indicated earlier, this level of understanding does not fully explain the fullness of the phenomenon of addiction, nor does it explain addiction’s resiliency in the face of extended abstinence. Vaillant’s (1995) notion of addiction as both a disease and a behavioral problem points the way to a more complete understanding of this disorder.

Psychological factors

While I do not view addiction as a primarily psychological disorder, I do believe that psychological factors play a significant role in the etiology and maintenance of the disorder. While a full DSM diagnosis may not be necessary for this factor to come into play, certain psychological traits do appear to be related to the development of alcoholism and addiction. A clinical vignette will illustrate this:

A woman in her early 20s sought help because her alcohol use was becoming increasingly problematic. In college she could out-drink her peers, but this was not viewed as a significant issue, as heavy drinking was the norm among her friends. However, in the years since her graduation, her friends had curtailed their use considerably, whereas she had continued to drink at similar or greater levels. An evaluation revealed some classic symptoms of alcohol dependence: she had an elevated tolerance for alcohol, she clearly demonstrated loss of control, and she was beginning to experience withdrawal symptoms. Furthermore, she had a family history of alcoholism, including her father, who was a recovering alcoholic. However, this woman did not present with a significant level of denial or defensiveness around her drinking. She sought help relatively early in her awareness of this becoming a problematic issue in her life. It was relatively easy in this case to provide some educational counseling about the nature of alcoholism, the signs and symptoms of the disorder, and the likely outcome if she continued to consume alcohol. This woman was able to terminate her use of alcohol successfully at that time, given the information presented and her own openness around her problems.

The primary psychological dimension construed as relevant for the development of alcoholism at this level is the presence of a kind of defensiveness and/or denial, specifically around the issues of alcohol consumption. This denial may be a more pervasive style, active in other areas of life, or it may be confined to this one issue. However, the presence of a factor that allows the biological factors to develop unchecked appears to be instrumental for the progression of the disease.

The existence of defensive structures is hardly unique to alcoholics and addicts. The avoidance of dealing with the full force of reality appears to be present in a wide variety of both pathological and normal psychological processes. However, the combination of this factor and the underlying biological factors constitute the necessary and sufficient conditions for the development of addictive disease.

Other psychological factors come into play at this level as well. Actual psychopathology, including distortions in the perception of reality based on thought or mood disorders, may act to render the person more vulnerable to indulging in their substance of choice. Depression may play a role both in lowering the energy level necessary to “fight” the urges to use, as well as increase the desire to escape. Mania may increase the urge to feel better than good.

However, what is common to psychological variables at this level is their dynamic nature. The degree of

defensiveness present is seen as contingent on the degree of threat posed. There is a motivated quality to this kind of defensive operation. To some degree, the actual defensiveness which emerges is related to the presence of the addiction itself, in the sense that we tend to protect ourselves from an awareness of vulnerability (Adler, 1929).

The role of expectancies may be best seen as operating at this level of the disease. A person's set of beliefs about drinking and about alcohol appear to be significant factors in the desire to drink, and in their perceptions of effect of alcohol (Brown *et al.*, 1980).

Habits and learned behavior

Beyond the dynamic forces of denial and defensiveness described above, the role of conditioning is highly relevant in maintaining addiction. While a purely behavioral model of addiction falls short of being a fully explanatory vehicle, many of the basic principles of learning theory are relevant in understanding some of the phenomena of addiction.

Simple classical conditioning is invoked in understanding the role of cues involved in perpetuating addictive behavior. The presence of a certain person in one's life when getting high becomes paired with the feelings associated with getting high, and that person eventually becomes a conditioned stimulus for that behavior. In recovery language, it is important to avoid the "people, places, and things" associated with one's addiction. These are considered "triggers," or cues that can stimulate cravings and/or addictive behaviors.

Operant conditioning is invoked, given the powerful reinforcement that the drugs themselves provide. The entire sequence of behaviors leading to drinking or to getting high form a chain of associations that become reinforced when the person begins to feel the effects of the drugs themselves.

A few simple examples can illustrate the behavioral principles involved. Imagine a man who comes home, hangs his coat in the closet, walks through the living room to the kitchen, opens the refrigerator door, and cracks open a cold beer. This entire ritual is reinforced by the high he experiences as he drinks. This sequence forms a habit, anchored by the end point of drinking. Returning home from an inpatient rehab experience of 30, 60 or 90 days, he will find that this set of behaviors continues to exert an influence on him. A patient who smokes cocaine with his brother will experience urges to use when he meets

with him, even if both are committed to sobriety; the brother's intent is irrelevant to the power of his simple presence in triggering an urge to use in the subject.

In the first case, the patient may derive benefit from breaking up the sequence of events, perhaps by beginning to hang his coat elsewhere, moving the furniture in the living room or the refrigerator. (Of course, removing the alcohol from the refrigerator itself is essential to anyone committed to sobriety!) The latter example may find little satisfaction except through avoiding the other person until one's sobriety is more established, or by only meeting in highly controlled circumstances.

The important aspect to remember at this level is that dynamic interpretations are not always relevant to some addictive behaviors. Examining these behaviors as "self-destructive" or "self-sabotaging" may miss the point entirely. These behaviors may not be highly motivated at all – they may simply be deeply ingrained habits. Insight will only be useful in helping to devise alternative behavioral strategies.

Cognitive factors may also be seen as relevant under this heading. Expectancies about the role of alcohol in social functioning can be powerful in determining both the decision to drink and the behaviors that occur when drinking. This issue will also come into play in the social context.

Family dynamics

The notion of addiction as a family disease has become almost a cliché in many treatment programs, resulting in a wide variety of interventions to involve the family in treatment of addicted individuals. However, there is a real lack of consensus about the presumed nature of family factors in addiction and recovery, ranging from theories that family dynamics are responsible for "causing" addiction to a simpler (and less controversial) idea that addiction in a family affects all members.

In this model, family dynamics are seen as reinforcers of addictive behavior, regardless of whether they are initially causal or not. Family dynamics can come to revolve around a member's addiction, just as they adapt to any other serious illness in a family. Family members learn to avoid dealing with dad when he is drunk and this avoidance prevents dad from experiencing some of the natural consequences of his behavior. By accommodating the addiction, the family serves to support it.

In its extreme form, “enabling” behaviors serve to keep the addicted person from experiencing negative consequences, and may serve a reciprocal purpose in the involved family members. A parallel process, “scapegoating,” identifies the patient as the source of all family woes; the family members may seek to preserve this homeostatic balance, and avoid dealing with other disturbing facets of their family life.

Enabling is a more complex behavior than may initially be apparent. It is easy to view enabling as a negative set of behaviors that merely serve to reinforce the addiction. However, there are usually other factors at play, making the motivations and implications of the enabling (and the termination of such behavior) problematic on other levels. To use a familiar example, a wife may be persuaded to call her husband’s employer to say he has the flu, when he is, in fact, hungover or on a binge. However, this call may be what saves the husband’s job, and therefore preserves the health insurance and income of the family.

The important issue from the perspective of this model is that family factors may play a significant role in the development and maintenance of addictive behaviors, as well as in the recovery from the addiction.

Social factors

Social factors operate at two levels. The first level concerns actual social interactions. The role of peer pressure in the initiation and maintenance of substance abuse and dependence is profound. For certain people, this issue is one of the chief obstacles to recovery, and is a key relapse factor, as noted in the advice to recovering people to avoid “people, places, and things” associated with their addiction.

Rarely, peers will deliberately sabotage a recovering person’s attempt to stay sober, either by spiking a drink, by encouraging drug use, or by direct interpersonal pressure. It is far more common, however, for the peer group to just “not get it,” not understand the need for abstinence. Newly recovering people may also “not get it” and seek to re-establish regular contact with drug-using friends or drinking buddies, but hope to abstain in their company; however, most find that this is notoriously difficult to do, whether through their own cravings while in their company, actual inducements to use from the friends, or simply the social expectations of the situation.

Newly recovering people are often reminded that their sobriety may be seen as a threat by other addicted

individuals, and that these friends may not be as supportive as hoped for. Addictions counselors will often advise patients that these drinking buddies are not really friends. However, this misses the point in that these friendships may have been experienced as real and sustaining, and may have been as good as it gets to the addicted person. We all need social contact, and, for many, the superficial camaraderie of a bar or a crack house may be a reasonable substitute for true interpersonal relationships.

At another level, addiction is supported by one’s social self-definition. For many people, a primary marker of adulthood is the ability to drink legally. This translates into a self-image that relies significantly on one’s substance abuse, whether that conveys sophistication, coolness, or alienation. For those whose substance abuse began in their adolescence, a quality of rebellion may be fused with the substance use, and may form a key part of their sense of self.

Cultural factors

It is an inescapable fact that we live in a culture that promotes substance abuse. There are reminders of substance use, particularly drinking, shouting at us from billboards, magazines, television, and all other forms of media. Our culture, deliberately and not so deliberately, cultivates the image of substance use as something tolerable, acceptable, even glamorous or exciting.

Although there have been some attempts to change this cultural message in recent years, this has made small inroads against the advertising budgets of the alcohol and tobacco industries. Musical messages also serve to promote partying and even some antidrug messages may subtly promote substance use.

More subtle than the actual drinking and drugging cues is the underlying cultural message that the solution to discomfort lies in chemical cure, and that discomfort itself is undesirable. One of the more difficult tasks for newly recovering people is in learning to tolerate some of the “normal” aches and pains of living, both physical and psychological.

In my office I have a cartoon posted. A psychoanalyst is addressing a patient lying on a couch. The analyst says, “I’ve concluded that you have an addictive personality.” The patient exclaims, “That’s awful! What can I take for that?”

A person seeking to recover in such an environment must face such cues and messages on an ongoing basis, and must find a way to have the message of

sobriety reinforced in an equally powerful manner. The role of AA or similar support groups is invaluable in providing a strong message that abstinence is possible and is healthy, and that the message provided by the culture at large is dangerous and misleading.

Another problem is a prevailing underlying cultural belief in the moral model or the psychological model of addiction. Addicts and alcoholics are seen in an extremely negative light, as deficient creatures. The Reagan-era message of “Just Say No” continues to reverberate in the public consciousness, and those who find it difficult or impossible to do so are frequently seen as degenerates. Unfortunately, this message has also been internalized by many addicts and alcoholics, and the resultant shame has often discouraged them from seeking help or acknowledging their own problems. (As will be discussed below, this feeds into the level of psychological defensiveness and denial.)

Existential factors

The difficulty of accepting one’s addiction is one of the first hurdles to be experienced in the process of recovery. It is often difficult in our “Do-it-yourself” society (Slater, 1970) to accept that one cannot do everything alone. Acceptance of our limitations can be the beginning of a calmer mindset, one of acceptance and surrender (Kurtz, 1982).

Writers on recovery topics describe the act and process of surrender as a turning point in the addict’s acceptance of his or her disease state (Tiebout, 1949; 1953). This insight may lead to a larger shift in world view from a competitive to a complementary mode (Bateson, 1972). While this is one of the benefits of recovery, it is also one of the more significant obstacles, and one of the factors that keeps the addiction in place.

The messages of self-sufficiency and individuality that are so prevalent in our culture resonate at a more profound personal level as well. Acceptance of one’s addiction brings an end to any lingering infantile notions of omnipotence (Kurtz, 1982). The need to accept help and support from others resurrects our earlier, preverbal, struggles with feelings of inferiority (Adler, 1929). This sense of incompleteness, which binds us to others, also violates our sense of personal autonomy.

However, these insights may also form the nucleus of a new sense of self, and a new relationship to others. This insight of incompleteness and limitation can lead

to a “spirituality of imperfection” (Kurtz & Ketcham, 1992) based on mutual interest and affiliation. This is closely related to the spirituality central to the fellowship of AA and other such twelve-step groups.

Implications of the integrative model

I believe that some of the confusion in this area of discourse arises from confusion around levels of interpretation. For some, the “disease” of addiction resides purely in the biological aspects of the disorder. For these theorists (e.g. Milam & Ketcham, 1981) the physiological aspects of the disorder define it – there is little need to search further to explain the phenomenon. These theorists have been described as “unidimensional” (White, 1998) in their reliance on biological factors, even if there are differences about the precise mechanisms involved.

Recent advances on brain imaging and related technological breakthroughs have also tended to emphasize the center circle of the proposed model. Even when other aspects are invoked, it is hard to measure them, and less impressive to present, when the lure of brain images and neurological studies appear to offer profound new insights into this aspect of addictive behavior. The “bio” is sleek and new, and the “-psychosocial” is old and imprecise. This may not be the intent of these researchers, but it is often the result.

For many others, however, there is a far vaguer idea of the “disease” of addiction, one which includes many of the other factors in the model. When a recovering addict experiencing some cravings is told “that is your addiction talking to you,” it is unclear which level of the model is being invoked. Perhaps the “talk” is coming from the biological cravings; more likely, however, the psychological or learned dimensions are being referenced.

It is difficult, as well, to speak of a disease being “existential,” or even “social” or “cultural,” without veering into the realm of the metaphorical, again undermining the meaning of the term “disease.”

This semantic confusion undermines a sense of scientific integrity. It is difficult to come to a consensus on the nature of addiction if the terms that are so central to the discourse are so imprecisely defined. I believe that the observed entity we treat in our clinics and rehab centers includes all levels of the proposed model, and that, for convenience and to recognize the challenges faced by a recovering person, the frame of

reference should include all levels of this proposed model.

In this spirit, I propose that we include all levels as part of the disease entity, with an understanding that the biological roots of the disorder are the only aspect directly dependent upon a biological explanation. I believe that this helps us to clarify some of the debate about the biological underpinnings of the disorder, and moves us from a purely biological understanding (rooted in advances in our understanding of brain functioning) to a more truly biopsychosocial conception. When an addict is helped to understand that all of these levels are operating and are all relevant to their recovery, a great deal of the mystification which paralyzes action will be relieved.

Another implication of this model is that there is considerable dynamic interaction among the levels of the model. The existential difficulty of “accepting surrender” and the cultural image of a hopeless drunk feed into the level of defensiveness about accepting the presence and nature of the illness. The biological reinforcement provided by the drugs of abuse goes a long way to explain why this habit is particularly pernicious and resistant to extinction. The social factors interplay with psychological factors in conceptions of identity and social interaction. It is helpful to remember that the levels identified are abstractions from the workings of the disorder, as it exists in nature.

Finally, a model such as this one provides some clarity in terms of developing treatment planning efforts. An assessment of the patient’s functioning at each level will help clinicians to determine where input is needed. A patient with a high level of family dysfunction may require more immediate attention to that dimension than one whose family is supportive and understanding of recovery. A person with a greater ability to face his or her addiction honestly, without defensive reactions, may require less strenuous intervention on that level. The level of acceptance of the existential dimensions provides a forum for discussion of spirituality, and the possible role of pastoral care. All patients, of course, require a good assessment of their biological functioning, both in terms of pharmacological intervention for withdrawal and for the possibility of anticraving medications.

By coming to an integrative perspective on the disease of addiction, and by utilizing this approach consistently, we are in a better position to understand and manage this crippling disorder in a manner that is both effective and holistic.

References

- Adler, A., (1929). *The Practice and Theory of Individual Psychology*. London: Routledge & Kegan Paul.
- Alcoholics Anonymous. (2001). *Alcoholics Anonymous*, 4th Edition. New York: AA World Services.
- American Psychiatric Association. (1968). *Diagnostic and Statistical Manual of Mental Disorders*, 2nd Edition. Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2005). *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition, Text Revision. Washington, DC: American Psychiatric Association.
- Baler, R. D. & Volkow, N. D. (2006). Drug addiction: The neurobiology of disrupted self-control. *Trends in Molecular Medicine*, **12**, 559–66.
- Bateson, G. (1972). The cybernetics of “self”: A theory of alcoholism. In Bateson, G. *Steps To An Ecology of Mind*. New York: Ballantine Books.
- Brown, S. A., Goleman, M. S., Inn, A. Anderson, L. R. (1980). Expectations of reinforcement from alcohol. *Journal of Consulting and Clinical Psychology*, **48**, 419–26.
- Dodes, L. (2002). *The Heart of Addiction*. New York: HarperCollins.
- Erickson, C. (2007). *The Science of Addiction*. New York: WW Norton.
- Fingarette, H. (1988). *Heavy Drinking: The Myth of Alcoholism as a Disease*. Berkeley: University of California.
- Goodwin, D. W. (1994). *Alcoholism: The Facts*. Oxford, U.K.: Oxford University Press.
- Humphreys, K. & Rappaport, J. (1993). From the community mental health movement to the war on drugs: A study in the definition of social problems. *American Psychologist*, **48**, 892–901.
- Jellinek, E. M. (1960). *The Disease Concept of Alcoholism*. New Haven, Ct.: College and University Press.
- Kurtz, E. (1982). Why AA works: The intellectual significance of Alcoholics Anonymous. *Journal of Studies on Alcohol*, **43**, 38–80.
- Kurtz, E. & Ketcham, K. (1992). *The Spirituality of Imperfection: Storytelling and the Journey to Wholeness*. New York: Bantam Books.
- Marlatt, G. A., Demming, B. & Reid, J. B. (1973). Loss of control drinking. in Alcoholics: an experimental analogue. *Journal of Abnormal Psychology*, **81**(3) 233–41.
- Melzack, R. (1990). The tragedy of needless pain. *Scientific American*, **262**, 27–33.
- Milam, J. R. & Ketcham, K. (1983). *Under The Influence*. New York: Bantam Books.

- Peele, S. (1989). *Diseasing of America: Addiction Treatment Out of Control*. Lexington, MA: Lexington Books.
- Rogers, R. L. & McMillin, C. S. (1989). *Don't Help: A Positive Guide to Working with the Alcoholic*. New York: Bantam Books.
- Schenker, M. D. (2009). *A Clinician's Guide to 12-Step Recovery*. New York: WW Norton.
- Schuckit, M. A. (1988). Reactions to alcohol in the sons of alcoholics and controls. *Alcoholism: Clinical and Experimental Research*, **12**, 465–70.
- Schuckit, M. A. (1994). Low level response to alcohol as a predictor of future alcoholism. *American Journal of Psychiatry*, **151**, 184–9.
- Slater, P. (1970). *The Pursuit of Loneliness*. Boston: Beacon Press.
- Stanton, M. D. (1976). Drugs, Vietnam, and the Vietnam veteran: An overview. *American Journal of Drug and Alcohol Abuse*, **3**, 557–70.
- Stanton, M. D. Todd, T. C. et al. (1982). *The Family Therapy of Drug Abuse and Addiction*. New York: Guilford.
- Tiebout, H. M. (1949). The act of surrender in the therapeutic process. *Quarterly Journal of Studies on Alcohol*, **10**, 48–58.
- Tiebout, H. M. (1953). Surrender versus compliance in therapy. *Quarterly Journal of Studies on Alcohol*, **14**, 58–68.
- Vaillant, G. (1995). *The Natural History of Alcoholism Revisited*. Cambridge, MA: Harvard University Press.
- Vaillant, G. (2003). A 60-year follow-up of alcoholic men. *Addiction*, **98**, 1043–51.
- White, W. L. (1998). *Slaying The Dragon: The History of Addiction Treatment and Recovery in America*. Bloomington, IL: Chestnut Health Systems.