

I

A Modern Plague

“That is the essence of science: ask an impertinent question, and you are on the way to a pertinent answer.”

—JACOB BRONOWSKI (1973)¹

This is the story of a medical puzzle. The puzzle is of a most curious sort, and yet one that we as a society desperately need to solve, for it tells of a hidden epidemic that is diminishing the lives of millions of Americans, including a rapidly increasing number of children. The epidemic has grown in size and scope over the past five decades, and now disables 850 adults and 250 children *every day*. And those startling numbers only hint at the true scope of this modern plague, for they are only a count of those who have become so ill that their families or caregivers are newly eligible to receive a disability check from the federal government.

Now, here is the puzzle.

As a society, we have come to understand that psychiatry has made great progress in treating mental illness over the past fifty years. Scientists are uncovering the biological causes of mental disorders, and pharmaceutical companies have developed a number of effective medications for these conditions. This story has been told in newspapers, magazines, and books, and evidence of our societal belief in it can be found in our spending habits. In 2007, we spent \$25 billion on antidepressants and antipsychotics, and to put that figure in perspective, that was more than the gross domestic product of Cameroon, a nation of 18 million people.²

In 1999, U.S. surgeon general David Satcher neatly summed up this story of scientific progress in a 458-page report titled *Mental Health*. The modern era of psychiatry, he explained, could be said to have begun in 1954. Prior to that time, psychiatry lacked treatments that could “prevent patients from becoming chronically ill.” But then Thorazine was introduced. This was the first drug that was a specific antidote to a mental disorder—it was an *antipsychotic* medication—and it kicked off a psychopharmacological revolution. Soon *antidepressants* and *antianxiety* agents were discovered, and as a result, today we enjoy “a variety of treatments of well-documented efficacy for the array of clearly defined mental and behavioral disorders that occur across the life span,” Satcher wrote. The introduction of Prozac and other “second-generation” psychiatric drugs, the surgeon general added, was “stoked by advances in both neurosciences and molecular biology” and represented yet another leap forward in the treatment of mental disorders.³

Medical students training to be psychiatrists read about this history in their textbooks, and the public reads about it in popular accounts of the field. Thorazine, wrote University of Toronto professor Edward Shorter, in his 1997 book, *A History of Psychiatry*, “initiated a revolution in psychiatry, comparable to the introduction of penicillin in general medicine.”⁴ That was the start of the “psychopharmacology era,” and today we can rest assured that science has proved that the drugs in psychiatry’s medicine cabinet are beneficial. “We have very effective and safe treatments for a broad array of psychiatric disorders,” Richard Friedman, director of the psychopharmacology clinic at Weill Cornell Medical College, informed readers of the *New York Times* on June 19, 2007.⁵ Three days later, the *Boston Globe*, in an editorial titled “When Kids Need Meds,” echoed this sentiment: “The development of powerful drugs has revolutionized the treatment of mental illness.”⁶

Psychiatrists working in countries around the world also understand this to be true. At the 161st annual meeting of the American Psychiatric Association, which was held in May 2008 in Washington, D.C., nearly half of the twenty thousand psychiatrists who attended were foreigners. The hallways were filled with chatter about schizophrenia, bipolar illness, depression, panic disorder, attention deficit/

hyperactivity disorder, and a host of other conditions described in the APA's *Diagnostic and Statistical Manual of Mental Disorders*, and over the course of five days, most of the lectures, workshops, and symposiums told of advances in the field. "We have come a long way in understanding psychiatric disorders, and our knowledge continues to expand," APA president Carolyn Robinowitz told the audience in her opening-day address. "Our work saves and improves so many lives."⁷

But here is the conundrum. Given this great advance in care, we should expect that the number of disabled mentally ill in the United States, on a per-capita basis, would have declined over the past fifty years. We should also expect that the number of disabled mentally ill, on a per-capita basis, would have declined since the arrival in 1988 of Prozac and the other second-generation psychiatric drugs. We should see a two-step drop in disability rates. Instead, as the psychopharmacology revolution has unfolded, the number of disabled mentally ill in the United States has *skyrocketed*. Moreover, this increase in the number of disabled mentally ill has accelerated further since the introduction of Prozac and the other second-generation psychiatric drugs. Most disturbing of all, this modern-day plague has now spread to the nation's children.

The disability numbers, in turn, lead to a much larger question. Why are so many Americans today, while they may not be disabled by mental illness, nevertheless plagued by chronic mental problems—by recurrent depression, by bipolar symptoms, and by crippling anxiety? If we have treatments that effectively address these disorders, why has mental illness become an ever-greater health problem in the United States?

The Epidemic

Now, I promise that this will not just be a book of statistics. We are trying to solve a mystery in this book, and this will lead to an exploration of science and history, and ultimately to a story with many surprising twists. But this mystery arises from an in-depth

analysis of government statistics, and so, as a first step, we need to track the disability numbers over the past fifty years to make certain that the epidemic is real.

In 1955, the disabled mentally ill were primarily cared for in state and county mental hospitals. Today, they typically receive either a monthly Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI) payment, and many live in residential shelters or other subsidized living arrangements. Both statistics provide a rough count of the number of people under governmental care because they have been disabled by mental illness.

In 1955, there were 566,000 people in state and county mental hospitals. However, only 355,000 had a psychiatric diagnosis, as the rest suffered from alcoholism, syphilis-related dementia, Alz-

The Hospitalized Mentally Ill in 1955

	First Admissions	Resident Patients
Psychotic Disorders		
Schizophrenia	28,482	267,603
Manic-depressive	9,679	50,937
Other	1,387	14,734
Psychoneurosis (Anxiety)	6,549	5,415
Personality Disorders	8,730	9,739
All Others	6,497	6,966

Although there were 558,922 resident patients in state and county mental hospitals in 1955, only 355,000 suffered from mental illness. The other 200,000 were elderly patients suffering from dementia, end-stage syphilis, alcoholism, mental retardation, and various neurological syndromes. Source: Silverman, C. *The Epidemiology of Depression* (1968): 139.

heimer's, and mental retardation, a population that would not show up in a count of the disabled mentally ill today.⁸ Thus, in 1955, 1 in every 468 Americans was hospitalized due to a mental illness. In 1987, there were 1.25 million people receiving an SSI or SSDI payment because they were disabled by mental illness, or 1 in every 184 Americans.

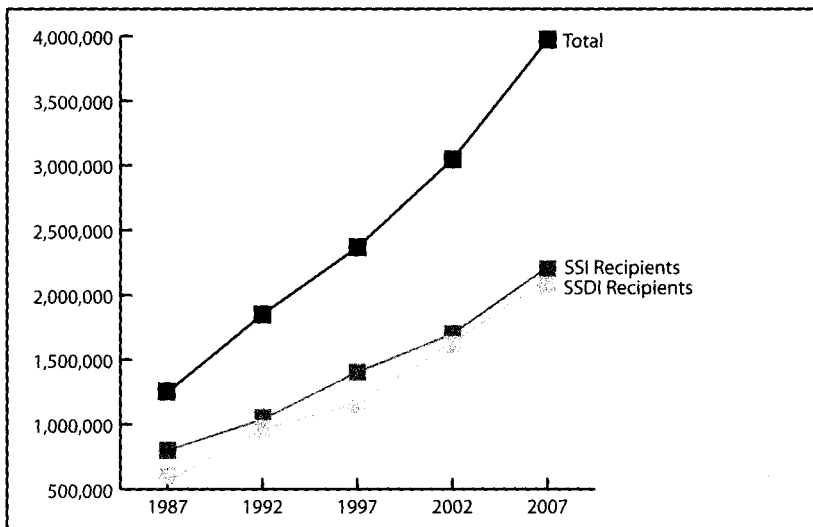
Now it may be argued that this is an apples-to-oranges comparison. In 1955, societal taboos about mental illness may have led to a reluctance to seek treatment, and thus to low hospitalization rates. It's also possible that a person had to be sicker to get hospitalized in 1955 than to receive SSI or SSDI in 1987, and that's why the 1987 disability rate is so much higher. However, arguments can be made in the other direction, too. The SSI and SSDI numbers only provide a count of the disabled mentally ill less than sixty-five years old, whereas the mental hospitals in 1955 were home to many elderly schizophrenics. There were also many more mentally ill people who were homeless and in jail in 1987 than in 1955, and that population doesn't show up in the disability numbers. The comparison is an imperfect one, but it's the best one we can make to track disability rates between 1955 and 1987.

Fortunately, from 1987 forward it's an apples-to-apples comparison, involving only the SSI and SSDI numbers. The Food and Drug Administration approved Prozac in 1987, and over the next two decades the number of disabled mentally ill on the SSI and SSDI rolls soared to 3.97 million.⁹ In 2007, the disability rate was 1 in every 76 Americans. That's more than double the rate in 1987, and six times the rate in 1955. The apples-to-apples comparison proves that something is amiss.

If we drill down into the disability data a bit more, we find a second puzzle. In 1955, major depression and bipolar illness didn't disable many people. There were only 50,937 people in state and county mental hospitals with a diagnosis for one of those affective disorders.¹⁰ But during the 1990s, people struggling with depression and bipolar illness began showing up on the SSI and SSDI rolls in ever-increasing numbers, and today there are an estimated 1.4 million people eighteen to sixty-four years old receiving a federal payment because they are disabled by an affective disorder.¹¹ Moreover, this trend is accelerating: According to a 2008 report by the U.S. General Accountability Office, 46 percent of the young adults (ages eighteen to twenty-six) who received an SSI or SSDI payment because of a psychiatric disability in 2006 were diagnosed with an affective illness (and another 8 percent were disabled by "anxiety disorder").¹²

The Disabled Mentally Ill in the Prozac Era

SSI and SSDI Recipients Under Age 65 Disabled by Mental Illness, 1987–2007



One in every six SSDI recipients also receives an SSI payment; thus the total number of recipients is less than the sum of the SSI and SSDI numbers. Source: Social Security Administration reports, 1987–2007.

This plague of disabling mental illness has now spread to our children, too. In 1987, there were 16,200 children under eighteen years of age who received an SSI payment because they were disabled by a serious mental illness. Such children comprised only 5.5 percent of the 293,000 children on the disability rolls—mental illness was not, at that time, a leading cause of disability among the country's children. But starting in 1990, the number of mentally ill children began to rise dramatically, and by the end of 2007, there were 561,569 such children on the SSI disability rolls. In the short span of twenty years, the number of disabled mentally ill children rose *thirty-five fold*. Mental illness is now the leading cause of disability in children, with the mentally ill group comprising 50 percent of the total number of children on the SSI rolls in 2007.¹³

The baffling nature of this childhood epidemic shows up with particular clarity in the SSI data from 1996 to 2007. Whereas the number of children disabled by mental illness more than doubled during this period, the number of children on the SSI rolls for all other reasons—cancers, retardation, etc.—*declined*, from 728,110

o 559,448. The nation's doctors were apparently making progress in treating all of those other conditions, but when it came to mental disorders, just the opposite was true.

A Scientific Inquiry

The puzzle can now be precisely summed up. On the one hand, we know that many people are helped by psychiatric medications. We know that many people stabilize well on them and will personally attest to how the drugs have helped them lead normal lives. Furthermore, as Satcher noted in his 1999 report, the scientific literature does document that psychiatric medications, at least over the short term, are "effective." Psychiatrists and other physicians who prescribe the drugs will attest to that fact, and many parents of children taking psychiatric drugs will swear by the drugs as well. All of that makes for a powerful consensus: Psychiatric drugs work and help people lead relatively normal lives. And yet, at the same time, we are stuck with these disturbing facts: The number of disabled mentally ill has risen dramatically since 1955, and during the past two decades, a period when the prescribing of psychiatric medications has exploded, the number of adults and children disabled by mental illness has risen at a mind-boggling rate. Thus we arrive at an obvious question, even though it is heretical in kind: Could our drug-based paradigm of care, in some unforeseen way, be fueling this modern-day plague?

My hope is that *Anatomy of an Epidemic* will serve as an exploration of that question. It's also easy to see what we must find if we are to solve this puzzle. We will need to discover a history of science that unfolds over the course of fifty-five years, arises from the very best research, and explains all aspects of our puzzle. The history must reveal why there has been a dramatic increase in the number of disabled mentally ill, it must explain why disabling affective disorders are so much more common now than they were fifty years ago, and it must explain why so many children are being laid low by serious mental illness today. And if we find such a history, we

should then be able to explain why it has remained hidden and unknown.

It's also easy to see what is at stake here. The disability numbers only hint at the extraordinary toll that mental illness is exacting on our society. The GAO, in its June 2008 report, concluded that one in every sixteen young adults in the United States is now "seriously mentally ill." There has never been a society that has seen such a plague of mental illness in its newly minted adults, and those who go on the SSI and SSDI rolls at this young age are likely to spend the rest of their lives receiving disability payments. The twenty-year-old who goes on SSI or SSDI will receive more than \$1 million in benefits over the next forty or so years, and that is a cost—should this epidemic continue to grow—that our society will not be able to afford.

There is one other, subtler aspect to this epidemic. Over the past twenty-five years, psychiatry has profoundly reshaped our society. Through its *Diagnostic and Statistical Manual*, psychiatry draws a line between what is "normal" and what is not. Our societal understanding of the human mind, which in the past arose from a medley of sources (great works of fiction, scientific investigations, and philosophical and religious writings), is now filtered through the DSM. Indeed, the stories told by psychiatry about "chemical imbalances" in the brain have reshaped our understanding of how the mind works and challenged our conceptions of free will. Are we really the prisoners of our neurotransmitters? Most important, our children are the first in human history to grow up under the constant shadow of "mental illness." Not too long ago, goof-offs, cut-ups, bullies, nerds, shy kids, teachers' pets, and any number of other recognizable types filled the schoolyard, and all were considered more or less normal. Nobody really knew what to expect from such children as adults. That was part of the glorious uncertainty of life—the goof-off in the fifth grade might show up at his high school's twenty-year reunion as a wealthy entrepreneur, the shy girl as an accomplished actress. But today, children diagnosed with mental disorders—most notably, ADHD, depression, and bipolar illness—help populate the schoolyard. These children have been told that they have something wrong with their brains and that they may

have to take psychiatric medications the rest of their lives, just like a “diabetic takes insulin.” That medical dictum teaches all of the children on the playground a lesson about the nature of humankind, and that lesson differs in a radical way from what children used to be taught.

So here is what is at stake in this investigation: If the conventional history is true, and psychiatry has in fact made great progress in identifying the biological causes of mental disorders and in developing effective treatments for those illnesses, then we can conclude that psychiatry’s reshaping of our society has been for the good. As bad as the epidemic of disabling mental illness may be, it is reasonable to assume that without such advances in psychiatry, it would be much worse. The scientific literature will show that millions of children and adults are being helped by psychiatric medications, their lives made richer and fuller, just as APA president Carolyn Robinowitz said in her speech at the APA’s 2008 convention. But if we uncover a history of a different sort—a history that shows that the biological causes of mental disorders remain to be discovered and that psychiatric drugs are in fact *fueling* the epidemic of disabling mental illness—what then? We will have documented a history that tells of a society led horribly astray and, one might say, betrayed.

And if that is so, we will spend the final part of this book looking at what we, as a society, might do to forge a different future.