

The Bible of Psychiatry

Lorraine was twenty-four years old, married, had a promising career—and she was falling apart.

I was interviewing her in my private practice office in Newburyport. I had finished my residency at Mass General a couple of years earlier and had set up shop in a nineteenth-century brick building with a view of a white-steepled church. It had not taken me long to become fairly busy, since there weren't many psychiatrists an hour north of Boston.

"I don't know what's wrong with me," Lorraine said. "I can't seem to do anything. I can't even drive to work."

As she pulled her brown hair behind her ears, she began to cry. I handed her the box of Kleenex that I always keep on my desk.

"I'm on temporary disability," she explained, pulling a tissue from the box. "I can't believe it. I've always worked. I love my job."

This was our first meeting. Lorraine had been referred to me by her primary care doctor, who asked me to treat her for anxiety.

"She seems to have some combination of anxiety and depression," her doctor had told me over the phone. "I gave her some Valium, but I don't think it's helped."

In Newburyport, primary care doctors often try to handle their patients' psychiatric problems rather than waiting the month or two required before their patients can get an appointment with a psychiatrist. Often, that works fine. Internists can prescribe the full range of antidepressants and antianxiety pills, and they get plenty of experience, given how common psychiatric problems are. But in Lorraine's case, her antianxiety drug was not working. My job was to do a structured interview to see if I could discover a diagnosis that was being missed, and then to come up with a more appropriate treatment.

A psychiatric interview has a certain rhythm to it. You start by listening to what your patient says for a few minutes, without interrupting, all the while sorting through possible diagnoses. This vast landscape of distress has been mapped into a series of categories in the DSM,¹ psychiatry's diagnostic manual, now in its fourth edition. The book breaks down mental suffering into sixteen groups of disorders, such as those of mood, anxiety, psychosis, and memory. As I listened to Lorraine, it was clear to me that she had one of the anxiety disorders, but which one? There are twelve options listed among DSM-IV's menu of nearly four hundred psychiatric diagnoses.

I learned that Lorraine was a paralegal, talented and well liked by her employer. But over the last year she had noticed a mounting anxiety every morning as she got ready for her commute. Once on the road, the frightful Boston commuter traffic gave her a sensation of being trapped—to an extent a normal response, but in Lorraine it had become extreme. She had panic attacks daily, during which she felt suddenly claustrophobic and suffocated, captured by an urgent need to get off the highway. Her heart pounded rapidly, she would sweat profusely, she became dizzy and was convinced that she was about to faint, though she never did. She would pull off at the nearest exit, and once her anxiety subsided, she would complete her commute on surface streets.

After she described these symptoms to me, she came right out and asked me a question that I believe is often at the back of patients' minds: "Am I going crazy?"

"No," I said, "you're not going crazy. You're having panic attacks. I see this all the time—let me explain what happens."

I went on to talk to her about how panic attacks start, what sort of symptoms they cause, and how readily they are treated. In doing so, I was taking advantage of one of the best qualities of DSM-IV—its ability to help organize the chaos of experience. In asking me if she was crazy, Lorraine was saying she was overwhelmed by what she was going through. Not only was she having panic attacks, but, in a vicious spiral of mounting anxiety, she was terrified of what these attacks represented. Was she really "losing it"? Would she end up strapped to a bed in a psychiatric ward, requiring injections of sedatives from the modern equivalents of Nurse Ratched from *One Flew over the Cuckoo's Nest*?

DSM assigns each slice of craziness with a name and a number. Panic disorder, for example, is disease number 300.21, a diagnostic code that I must provide to the insurance company to get reimbursed. Naming psychiatric disorders reassures patients, who often improve markedly just by hearing that they have a condition that is well-recognized and treatable. But just because it has a name, is it actually a disease? We commonly think of diseases as collections of symptoms with clear biological origins. Psychiatric diseases are similar but different. They are indeed collections of symptoms, but without any clear biological cause. Because of this, we come up with our diagnoses through the kinds of long conversations that I had with Lorraine.

In order to confirm that she had panic attacks, I asked her about thirteen possible panic symptoms as listed in DSM-IV. Patients must report at least four to qualify, and Lorraine easily met the cut, reporting six: shortness of breath, palpitations, dizziness, sweating,

shaking, and a fear of fainting. But having had a panic attack per se doesn't mean you have panic disorder. Panic attacks are common. Being claustrophobic, I've had two panic attacks—once while sitting in the cabin of a hot airplane stuck on the tarmac in Washington, D.C., and once while crawling through the Vietcong tunnels as a tourist in Vietnam.

But in order to be diagnosed with panic disorder, you have to have panic attacks that are so frequent and so severe that they interfere with everyday functioning. The task of a psychiatrist is to understand the definitions of our diseases, and to efficiently ask all the right questions and to interpret the answers appropriately.

"How often do you have these panic attacks?" I asked Lorraine.
 "At least once every day during the week."

"What about on the weekends?"

"Only on Sunday night, when I start worrying about having to drive to work the next day. All I can think about is that I might have a panic attack on the road."

"And do you find yourself worrying or thinking about panic attacks much of the time?"

"All the time!"

Clearly, anxiety was taking over Lorraine's life, and the anxiety was somehow triggered by her work life. But why now? She said nothing had changed at work. The panic attacks, she said, seemed to come out of the blue.

In an earlier era, this is where the work of a psychiatrist would really begin. We would dig. We would ask pointed questions. We wouldn't let the patient off the hook until we had figured out what made him or her tick.

No longer. The tradition of psychological curiosity has been dying a gradual death, and the DSM is part cause, part consequence of this transformation of our profession. These days, psychiatrists are *laced interspersed* in "unhinged" and *more interspersed* in "unhinged." In the next

when most psychiatrists were psychoanalysts, treatment entailed constructing elaborate explanations for how symptoms developed through early childhood experiences. Anxiety was thought to be caused when the conscious mind came face-to-face with unconscious desires and hidden memories—often of a sexual nature. If Lorraine had seen a psychiatrist in the 1950s or 1960s, chances were good that she would have had dozens of weekly fifty-minute sessions during which a clinician would listen quietly, seeking patterns and themes. The climax of treatment would be an “interpretation,” a statement like “You have always been terrified of male attention, beginning with your father—no wonder you are having panic attacks as you walk into the office of your boss, who, like your father, is an all-powerful male who holds your future in his hands.”

Many such explanations were, no doubt, true, but unfortunately the truth did not necessarily set patients free. Symptoms stubbornly remained. Gradually, the profession became disillusioned with psychoanalysis, and turned to other methods, such as psychopharmacology. The DSM provided a method that helped us make medication decisions. It is the main tool of what is termed “descriptive psychiatry,” in which we paint a detailed picture of the patient’s symptoms and try to come up with just the right label to reflect that picture.

Similarly, part of the psychiatric interview is a series of questions designed to rule out syndromes within all the categories of DSM. Thus, after I ascertained that Lorraine indeed had panic disorder, rather than drilling down into the causes of her anxiety, I went on to systematically ask her about syndromes in the other major categories of DSM-IV, including depression, psychosis, eating disorders, dementia, substance abuse, and so on.

I began with depression, because it often accompanies anxiety. There are nine possible DSM-IV symptoms of major depression, and patients who have five of the nine for at least two weeks receive the diagnosis.

“Aside from the anxiety you’ve been feeling lately,” I began, “have you also been feeling down and blue?”

“I’m always sad,” she responded, “because I never thought I would have to live this way.”

“Has the sadness been so bad that you wish you were dead?”

“No, I’m not suicidal, if that’s what you mean. I could never do that to my family.”

“I’m glad to hear that. It sounds like you still have hope, then?”

(There is a criterion of depression called “hopelessness,” which I was getting at here.)

“I have hope. That’s why I’m here.”

After I asked some more questions, it was clear that Lorraine had four depressive symptoms: sadness, insomnia, poor concentration, and poor energy. But she didn’t have the following: suicidality, appetite changes, agitation, lack of the ability to experience pleasure, or hopelessness. Because she had four rather than five out of nine symptoms, she didn’t qualify for major depression.

To review: Four out of thirteen panic symptoms equals panic disorder; five of nine depressive symptoms equals depression; and so on through the dozens of other disorders listed in our peculiar bible. Is there something in the human brain that dictates these numbering rules? Of course not. The modern criteria for depression and other diagnoses are human constructions, and were created in 1980 by a committee of the American Psychiatric Association, which ultimately published the DSM-III and defined the criteria for nearly three hundred other psychiatric diseases.

Over the years, the various versions of the DSM have been criticized and ridiculed. The book has been called a tool of the pharmaceutical industry and a collection of arbitrary labels based on shaky science. But with all its imperfections, it actually evolved out of a crying need in the profession for more precise descriptions of disorders, and it has done a great service by providing them. DSM actu-

ally represents the culmination of a profession's noble struggle to categorize the inner anarchy that is psychiatric illness.

The story of DSM properly starts in 1890, in Heidelberg, Germany, when a psychiatrist named Emil Kraepelin was hired to run a prominent psychiatric hospital.³ In the late 1800s, the classification of mental illness was primitive. There were two widely acknowledged categories: "insanity" (which included what we now call schizophrenia, bipolar disorder, and dementia) and "mental deficiency" (which comprised mental retardation and other developmental disorders).

At this time, most psychiatric research was done by neurologists, who studied slices of brain tissue in search of the presumed defects responsible for mental illness. To quote the historian Edward Shorter, the late 1800s saw an "absolute craze for studying psychiatry with microscopes." There was reason behind this craze, because by then psychiatrists had already discovered the cause of one version of insanity—neurosyphilis.

Since the late 1700s, physicians had described people who would suddenly behave bizarrely several years after having caught syphilis through sexual contact. We now know that the microorganisms, or "spirochetes," that cause syphilis go quiescent after causing transient genital sores. Decades may elapse before the spirochetes invade the brain, eventually causing psychiatric and neurological symptoms. Sometimes, the very first symptoms of neurosyphilis looked very much like mania. For example, according to Shorter's *A History of Psychiatry*, a distinguished mid-nineteenth-century German chemistry professor once "suddenly interrupted his lecture and started to tell gossip stories from the city. The previous day he had gone out and bought 10 automobiles and 100 wristwatches." The sudden onset of mania in a middle-aged male was considered to be neurosyphilis unless proven otherwise. Unfortunately, the illness was generally fatal until the advent of penicillin in the 1940s.

For Kraepelin, neurosyphilis, which was sometimes called "general paresis of the insane," provided a clear model of a form of insanity with an identifiable neuropathological explanation. It stood to reason that other forms of insanity would also yield their secrets to the microscope.

Assuming that all mental illnesses were discrete diseases with yet-to-be-discovered biological roots, Kraepelin decided that a first step in disentangling the causes was to more accurately classify the diseases. He developed a simple but effective method. Every time a patient was admitted to his hospital, he pulled out a card and wrote down the patient's name and presumed diagnosis. He would observe them and note highlights of their symptoms. When they were discharged, he wrote down the final diagnosis. He amassed hundreds of diagnostic cards, and spent his weekends looking for patterns. Which patients got better, and which patients stayed the same or worsened?

What Kraepelin discovered electrified the world of psychiatry. Rather than there being a single category called insanity, Kraepelin found that this label combined two very different types of patients. First, there were patients who became psychotic when young (in their teens or early twenties), and who generally never recovered. He called this disorder *dementia praecox*, Latin for "premature dementia." Later, Eugen Bleuler, a Swiss psychiatrist, renamed this disorder "schizophrenia," from the Greek for "split mind."

Kraepelin's second group of patients became ill somewhat later in life, had episodes of depression or mania (with or without psychosis), and, unlike the first group, tended to recover. He labeled these patients "manic-depressive." Today, we would say that some of these patients had bipolar disorder, which is a condition of alternating depression and mania, while some had "unipolar" depression, that is, depression without manic episodes.

Kraepelin's discovery revolutionized psychiatry because it gave

clinicians a way of predicting the course and prognosis of patients. If Kraepelin's new diagnostic scheme suggested that a given patient had dementia praecox (schizophrenia), he could inform the patient's family that the illness was dire, was unlikely to improve much, and might well last for decades. However, if a patient had Kraepelin's "manic depression," he could provide the good news that the patient would improve and might well behave normally for long stretches between episodes of depression or mania.

Unfortunately, aside from defining the outcomes, Kraepelin could do little else, because there were no effective treatments in his day. Patients were housed in asylums, where conditions varied from chaos and bedlam (in fact, the very word "bedlam" was derived from the name of one of the oldest asylums, Bethlem of London) to the relatively well-run and clean asylums in nineteenth-century Germany. A major component of "treatment" was the use of restraints to keep patients from harming themselves, but over time, some symptomatic treatments were developed and used. In the 1800s, for example, psychiatrists often prescribed extremely high dosages of laxatives, under the theory that the diarrhea and catharsis they induced would cut short the more severe psychotic episodes. Morphine injections enjoyed a burst of popularity in asylums for several decades. The drug worked well as a sedative and as a temporary mood elevator, but eventually doctors discovered how addictive it was and ceased its routine use. Other sedatives, such as chloral hydrate and "bromides," were used at various times and were symptomatically helpful, but were hardly cures. The sad fact is that before modern pharmaceuticals, mentally ill people lived their lives often confined to squalid wards, and were at the mercy of their hallucinations, agitated manic spells, and suicidal depressions.

Kraepelin, by systematically categorizing insanity, kick-started the process of searching for biologically based treatments. But had Kraepelin discovered real diseases? He assumed that he had. He

believed that if a group of patients shared the same course and prognosis, chances were good that they shared the same biological cause. While acknowledging that psychiatric science was too primitive to identify the actual brain defects causing these illnesses, he hoped that he had succeeded in discovering actual disease entities, thereby "carving nature at its joints." He had laid out the basic buckets of symptoms. He hoped that, over time, science would fill the buckets with more and more biological knowledge, so that, for example, manic depression would be understood just as biologically as endocrinologists now understand the symptoms of diabetes.

Fast forward to December 2007. It was a sunny but chilly winter day in Irvington, a leafy suburb a short subway ride north of Manhattan. I was standing in front of the home of Robert Spitzer, the modern-day Emil Kraepelin, a man who has become a living legend because he has almost single-handedly created the vocabulary of modern psychiatry. I rang the doorbell, and the door swung open. Facing me was Spitzer, wearing an apron, holding a spatula, and smiling as he asked me a distinctly nonpsychiatric question: "Hi. How would you like your eggs?"

"Scrambled," I replied, and we shook hands. I had e-mailed Spitzer a month earlier requesting an interview, and he had taken me up on my offer, inviting me to his home for breakfast and for conversation about his favorite topic—DSM.

Spitzer was elderly but not frail. I noticed a slight tremor of his hands and a limp in his gait, but his white-bearded face appeared vital, and he was still sharp enough to debate the fine points of psychiatric diagnosis, a skill that had gained him international fame.

In the 1970s, Spitzer⁴ was a young professor of psychiatry at Columbia University, and he had been tangentially involved in helping to write the second version of DSM—DSM-II,⁵ which had been published in 1968 (the very first DSM had been published in 1952). The DSM-II had been a small spiral-bound manual, a little over one

hundred pages listing 182 diagnoses. Its descriptions of disorders were vague and often referred to the concept of "neurosis," a term from psychoanalysis that has essentially disappeared from modern psychiatry. For example, in DSM-II, depression was referred to as "depressive neurosis" and was defined in a single sentence: "This disorder is manifested by an excessive reaction of depression due to an internal conflict or to an identifiable event such as the loss of a love object or cherished possession."

Given such brief and vague definitions, psychiatrists would often disagree on how to apply diagnoses to particular patients. The technical term for this problem is "poor diagnostic reliability." Studies done in the 1950s and 1960s found that the rates of diagnostic agreement between psychiatrists when faced with the same patient were embarrassingly low, from 32 percent to 42 percent.⁶ How much confidence could you have in your doctor if it was likely a psychiatrist across town would give you a completely different diagnosis?

The American Psychiatric Association, impressed with Spitzer's grasp of diagnostic categories, hired him in 1974 to oversee the creation of DSM-III, a newer version of DSM, which would help to solve the reliability problem. Spitzer and his colleagues reworked the manual in order to make the definitions of disorders more specific and objective. In their new system, each diagnosis was defined by a list of symptoms, each of which was described in enough detail to ensure that any psychiatrist would recognize their presence. They then defined a numerical threshold for each diagnosis, and if a patient met the minimum threshold number of symptoms, he or she "qualified" for the diagnosis.

In addition to beefing up the definitions of existing disorders, the committee added more disorders, so that the book increased in girth from 100 pages to 494 pages, and from 182 diagnoses to 265. Some of the new diagnoses included borderline personality disorder,

narcissistic personality disorder, post-traumatic stress disorder, and social anxiety disorder. In some cases, they deleted diagnoses that reflected outdated cultural mores and were controversial. For example, in DSM-II, homosexuality was considered a mental disorder, described as a "sexual deviation," and categorized in the same section as pedophilia. In DSM-III, homosexuality per se was no longer considered a disease; instead, there was a new syndrome called "ego-dystonic homosexuality," reserved for people whose homosexuality had caused them to become depressed.

I asked Spitzer how all these decisions about adding or deleting diagnoses were made.

"Ultimately," he said, "they were made by votes of a committee. We started with the categories that were already listed in DSM-II, and we brainstormed about other disorders that were being discussed in the psychiatric literature but which had not yet been formally defined."

"And how did you decide on the specific symptoms that would qualify a patient for a diagnosis?"

"There was a group of psychiatrists at Washington University in St. Louis who had already been working on what were called 'research diagnostic criteria.' This was an early effort to create reliable diagnoses for clinical research, and we based some of our diagnoses on these."

"But ultimately, was it just a committee decision?" I asked, thinking about my patient Lorraine, who just missed the depression diagnosis. "I mean, how did you decide, for example, on *five* criteria as being your minimum threshold for depression?"

"It was just a consensus," he said. "We would ask clinicians and researchers, 'How many symptoms do you think patients ought to have before you would give the diagnosis of depression?' And we came up with the arbitrary number of five."

"But why did you choose five and not four? Or why didn't you choose six?" I persisted.

He smiled impishly, saying, "Because four just seemed like not enough. And six seemed like too much."

"But weren't there any studies done to establish the threshold?"

"We did reviews of the literature, and in some cases we received funding from NIMH to do field trials."

In field trials, psychiatrists were recruited to "test-drive" proposed criteria. Typically, they would be asked to diagnose patients with depression (or other disorders) according to their best clinical judgment. Then, they would be given a long list of proposed DSM-III criteria, and asked to check off those which the patient met. The committee would look at this data to determine which of the criteria were deemed most important by practicing psychiatrists. They would estimate the minimum threshold of criteria from this data. This was tricky, and required quite a bit of judgment on the part of the committee. If you set the threshold too low, then too many people with only modest symptoms would get diagnosed, but if you set it too high, there was a risk of missing genuinely ill people who needed treatment.

When pressed, Spitzer admitted that even with the information from this research, arbitrary decisions had to be made.

"When you do field trials in depression and other disorders, there is no sharp dividing line where you can confidently say, 'This is the perfect number of symptoms needed to make a diagnosis.' With increasing numbers of symptoms you get increasing disability, and increased suffering, but there is no sharp cutoff point. It would be nice if we had a biological gold standard, which you could correlate with the number of symptoms, but that doesn't exist, because we don't understand the neurobiology of depression."

As Spitzer spoke, I was reminded of Emil Kraepelin, who was faced with precisely the same quandary. He single-handedly per-

formed his own rudimentary versions of the DSM field trials, in which he correlated patients' symptoms with how psychiatrically impaired they became. He was able to distinguish broad categories of pathology, hoping that psychiatrists in a hundred years would finally discover the biological markers for these diseases. But the brain is far too complex, and psychiatric diagnosis remains as much art as science.

As for depression, so it went for all the other psychiatric disorders. Spitzer and his group of experts met, discussed the scientific literature, looked at the field trial data, added a sprinkling of clinical wisdom, and voted on criteria for diagnosing schizophrenia, bipolar disorder, panic disorder, and nearly three hundred other sources of suffering.

After DSM-III came DSM-III-R (for "revised") in 1987, then DSM-IV in 1994, and DSM-IV-TR ("text revised") in 2000. With each subsequent edition, the number of diagnostic categories multiplied, and the books became larger and more expensive. Each became a best seller for the APA, and DSM is now one of the major sources of income for the organization.

But as its popularity among clinicians soared, it began to attract a host of critics. For example, the sociologists Herb Kutchins and Stuart Kirk have written two books critical of the DSM and have argued that "DSM is a book of tentatively assembled agreements."⁸ DSM, they charged, was capable of finding a diagnosis for everybody. "Where you thought your friends were just having normal troubles," they wrote in their 1997 book *Making Us Crazy*, "the developers of the American Psychiatric Association's diagnostic bible raise the possibility that you are surrounded by the mentally ill. Equally disconcerting to you, you may be among them."⁹

Even the leaders in psychiatry were poking fun at DSM. "The problem is that the diagnostic manual we are using in psychiatry is like a field guide and it just keeps expanding and expanding," noted

Dr. Paul McHugh, a professor of psychiatry at Johns Hopkins University, as quoted in a *New York Times* article. "Pretty soon," he joked, "we'll have a syndrome for short, fat Irish guys with a Boston accent, and I'll be mentally ill."¹⁰

The most controversial diagnoses are those that define conditions that are sometimes hard to distinguish from normality. For example, Christopher Lane, a literature professor at Northwestern University, has singled out one diagnosis, "social phobia" (sometimes known as "social anxiety disorder"), for particular scorn. DSM-IV defines the disorder thusly:

- A. A persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others.
- B. Exposure to the feared situation almost invariably provokes anxiety, which may take the form of a situationally bound or situationally pre-disposed Panic Attack.
- C. The person recognizes that this fear is unreasonable or excessive.
- D. The feared situations are avoided or else are endured with intense anxiety and distress.¹¹

According to Lane, another word for what is being clinically described here is "shyness," which is also the title of his book about the deficiencies of the DSM system.¹² Lane argues that psychiatry has redefined shyness as a disorder, whereas it was once an admired quality, associated with "bookishness, reserve, and a yen for solitude."¹³ In his view, psychiatrists like Spitzer took a normal human emotion, met behind closed doors in committees, and transformed it into a disease.

A similar critique has been leveled against PMDD, or "premen-

strual dysphoric disorder." Again, paraphrasing DSM-IV, here are the diagnostic criteria:

In most menstrual cycles during the past year, the following symptoms occur during the week before menstruation: depression, anxiety, mood swings, and lack of interest in activities once enjoyed. The symptoms must be severe enough to markedly interfere with work, school, or usual activities, and they must completely disappear for at least one full week after menstruation.¹⁴

Like social anxiety disorder, PMDD's symptoms sound very much like a "condition" that is a normal part of life. In its less severe form, this is premenstrual disorder, or PMS, and affects about 85 percent of all women. In an article called "The Strange Case of Dr. Jekyll and Ms. Hyde: How PMS Became a Cultural Phenomenon and a Psychiatric Disorder," Joan Chrysler and Paula Caplan argue that PMDD is an illusory label for normal discomfort.¹⁵ "Women are supposed to be cheerleaders," commented one of the authors. "When a woman is anything but that, she and her family are quick to think something is wrong."¹⁶

Both social phobia and PMDD point out a troubling vulnerability of most psychiatric diagnoses, which is that they exist on a spectrum. Shyness and menstrual discomfort are normal aspects of experience, and each of these experiences can range from mild to severe. Psychiatrists have cordoned off the most painful versions of normal life, defined them as syndromes, and have given them medical-sounding names. Kutchins and Kirk charge that this leads to the "pathologizing of everyday behaviors."

But I have a problem with these critiques. Although DSM reads like a cookbook, in fact real-life psychiatrists rarely use it as one. We

don't read off the list of symptoms to our patients as written in the manual, checking them off in order to mechanically apply a diagnosis. Instead, we ask about the symptoms in the context of both our patients' lives and the larger culture. Some patients might formally qualify for a diagnosis like social phobia, yet have symptoms that are so mild that we would not bother to diagnose or treat them. In fact, most of these patients would never even appear at our door.

On the other hand, there are some patients for whom extreme shyness can become a devastating illness, much worse than Lane's characterization of these people as simply bashful or bookish. For example, one of my colleagues referred a seventeen-year-old patient, Randall, to me for treatment of anxiety. When Randall came into my office, the most striking thing about him was that he could barely look at me. He kept his eyes focused on his lap, and spoke so softly I had to pull my chair closer to hear him.

Randall told me that he hated going to classes, and had skipped so many that he was in danger of failing. He avoided school because he was terrified of social encounters. "When I approach other kids," he said, "I have this overpowering sense of extreme worry." He thought other students were scrutinizing him, ridiculing him for being overweight. He was not paranoid or psychotic—he denied hearing voices or believing that others had malevolent intentions. He was just painfully, excruciatingly shy.

His symptoms perfectly fit the DSM-IV description of "social phobia": "a persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others." I started him on the standard medication treatment for this condition—an SSRI (in his case, Zoloft) and a tranquilizer (Xanax). Randall gradually improved, to the point that he was able to graduate and go on to college. The last time I saw him, he was planning to go on job interviews, social situations that "I wouldn't have been able to even fathom" before his treat-

ment. There has been no transformation in his personality—he still comes into my office appearing shy. He will always be "bookish and reserved," in Lane's terminology. But treatment is allowing him to have a life.

The situation is similar with premenstrual dysphoric disorder. In my experience, patients who actually receive the diagnosis are not simply women who are annoyed and uncomfortable with their PMS. Instead, they are at the end of their rope with their symptoms. Judy, for example, is a patient whom I was already treating for depression. Several months after I first met her, she told me that her depression worsened predictably during the week before her periods. "I feel so uncomfortable in my body," she recounted. "Nothing feels right, I can't even look at my children without screaming at them, and then I start crying. But once I get my period, I feel like I've become a normal person again."

Judy was already taking Prozac at a dose of 20 mg/day. Some studies have shown that simply bumping up the dose of an SSRI during "PMS week" solves the problem of PMDD, and I recommended that she increase her dose to 30 mg of Prozac one week every month, allowing her to avoid the worst of the PMDD symptoms. It worked for her.

Both of these patients illustrate that while the diagnostic labels may sound spurious, there are plenty of people out there who are genuinely suffering from the conditions they describe. As a rule, psychiatrists are not beating the bushes, hungry for new patients, trying to hang a label on perfectly healthy people to drum up business. In fact, the reverse is true. It is the patients who are looking for psychiatrists and often waiting months for an appointment.

This is not to say that there are no problems with DSM—but it is important to be clear about what its deficiencies actually are. By and large, DSM has not created pathology where it does not exist. But it has done something almost as harmful. It has drained the color out

of the way we understand and treat our patients. It has deemphasized psychological-mindedness, and replaced it with the illusion that we understand our patients when all we are doing is assigning them labels.

What do I mean? In preparation for this chapter, I leafed through Lorraine's chart (she is the patient who was having panic attacks at work), and realized that over the course of her treatment I had diagnosed her with seven separate diseases: panic disorder, major depression NOS (not otherwise specified), agoraphobia, obsessive compulsive disorder, generalized anxiety disorder, social phobia, and attention deficit disorder.

First, I diagnosed her with panic disorder, then quickly added "agoraphobia," which often accompanies panic disorder (agoraphobia is a fear of having a panic attack in certain places where a quick escape would be difficult). With treatment the panic subsided, but then she began to worry about whether she had left her stove on or her door unlocked—symptoms of obsessive compulsive disorder. Eventually, these symptoms went into quiescence, but then she developed a fear of being seen in public, leading to the diagnosis of social phobia. And so it continued, until Lorraine had racked up quite a list of labels.

The technical term for giving patients multiple different diagnoses, as I did with Lorraine, is "comorbidity," and it has become a widely acknowledged problem of the DSM system. Lorraine didn't actually have seven separate diseases, but because DSM categories often share many symptoms, it is common for patients to appear to qualify for separate disorders. Many psychiatric symptoms are nonspecific, meaning that they appear in the recipe list of many different diagnoses. Difficulty concentrating, for example, is a component of sixteen separate disorders, ranging from problems as diverse as dementia, schizophrenia, bipolar disorder, and ADHD. Insomnia shows up in dozens of disorders, as do impulsivity and changes in appetite.

All this overlap undermines our confidence that DSM's disorders are distinct from one another, and if they are not distinct, then perhaps they are not "real." My sense is that Lorraine, like many of my patients, has some basic underlying vulnerability to anxiety and depression, a vulnerability that probably has some yet-to-be-discovered basis in neurobiology. This underlying "mystery defect" can lead to a multiplicity of symptoms that wax and wane, and DSM allows us to apply different labels to these shifting symptom patterns.

If applying many different labels to patients actually helped us decide on the right treatment, the exercise would be worthwhile. But as it turns out, the precise label often has no effect on which medication I choose. For example, SSRIs like Zoloft are effective for at least a dozen supposedly distinct problems, including depression, panic disorder, OCD, bulimia, post-traumatic stress disorder, hypochondriasis, and so on. The nonspecificity of treatment further undermines our confidence that we understand the true nature of what we are treating.

With Lorraine, I had fallen into the trap of what I call "DSM-think," in which I spent too much time trying to fit her into categories and too little time trying to understand her as a person. This is a common failing of DSM, and one which even Michael First, the editor of DSM-IV, acknowledges. "DSM boils down the complexity of psychiatric disorders," First told me during a lunch interview near his office at Columbia University in New York, where he is a professor of clinical psychiatry. "People who are inclined to want to look for the easiest and the most efficient way to get their work done just grasp onto it, and a huge amount is lost when they do that. We used to joke that DSM should come with a combination lock and you can only open the book if you agree to really explore what is going on in the patient's mind."

DSM, First maintains, is a convenient tool for helping us to describe patients and make treatment decisions, but was never

meant to substitute for understanding our patients as people. My friend and colleague Brian Greenfield, a psychiatrist in Montreal, has a similar view.

"For me," he said, "DSM is like a GPS system. It allows me to find the basic location of my patient, so that I can figure out where he is. But once I've found him, I try to put the DSM aside, and I say, 'Brian, wait a minute—are you really communicating with him, are you really making his journey easier?' At that moment, DSM is very far away from me."

All of these deficiencies of the DSM have not gone unnoticed by the leadership of the APA. In 1999, the APA and NIMH began a series of conferences with leading experts to take a close look at DSM with the aim of coming up with a better manual, which will eventually be DSM-V. These meetings became the basis for a 2002 book, *A Research Agenda for DSM-V*.¹⁷

The *Research Agenda* introduced a term that has come back to haunt the DSM-V committee: "paradigm shift." Acknowledging that we know too little about the true nature of the DSM-IV disorders, the authors argued that DSM-V needed to be much more than just a more refined list of diseases. In their words: "All these limitations in the current diagnostic paradigm suggest that research exclusively focused on refining the DSM-defined syndromes may never be successful in uncovering their underlying etiologies. For that to happen, an as yet unknown paradigm shift may need to occur."¹⁸

Classically, paradigm shift means a significant change in the underlying assumptions within science. For example, the acceptance that the earth rotates around the sun rather than vice versa was a famous paradigm shift in the 1600s. When the DSM-V committee said we need a paradigm shift, they were making a big statement.

While the authors of the *Research Agenda* did not define exactly what this paradigm shift would entail, they mentioned some possibilities. One idea was that a review of the latest findings in neuro-

science would allow us to categorize psychiatric disease in terms of neurobiology or genetics. Another thought was to define mental disorders along a spectrum rather than as discrete categories. Instead of diagnosing someone with panic disorder or major depression, for example, perhaps a given patient could be described as scoring a 3 on anxiety, an 8 on depression, a 5 on poor concentration, and so on. Medications could then be chosen to target symptoms rather than to target static labels. In fact, this is not far from the way many psychiatrists actually make their prescribing decisions.

In 2002, when the *Research Agenda* was first published, the planned publication of DSM-V was a decade away, and there seemed to be plenty of time to nail down the specifics of the paradigm shift. But by 2008, it appeared that little had been accomplished. Robert Spitzer, the DSM pioneer who we met earlier in this chapter, became concerned and began to investigate. He wrote to both David Kupfer (the chair of DSM-V) and Darrel Regier (the vice-chair), asking them for copies of the minutes of the committee meetings.

According to Spitzer, who detailed the correspondence in one of the APA's journals,¹⁹ they refused his request, writing him that it was "important to maintain DSM-V confidentiality." They told Spitzer that all members of DSM-V task forces were now required to sign "confidentiality agreements," preventing them from revealing the content of committee discussions unless it was "necessary for the development of DSM-V."

Outraged, Spitzer responded that "this unprecedented attempt to revise *DSM* in secrecy indicates a failure to understand that revising a diagnostic manual—as a scientific process—benefits from the very exchange of information that is prohibited by the confidentiality agreement." In the same issue, the journal published a response from Regier and the APA leadership. Saying that there was a "misunderstanding concerning the confidentiality" of the DSM process, they assured the readers that committee members were free to talk

to others about the proceedings, as long as they felt it was necessary for their DSM-V work.²⁰

Soon, in an apparent attempt to appease critics, the APA posted more information about the DSM-V process on its Web site, including the names of all task force members, a full disclosure of their relationships with the drug industry, and summaries of the main points being discussed.²¹

That's when all hell broke loose.

Allen Frances, another Columbia university psychiatrist, who had been the chair of the DSM-IV committee, wrote a scathing editorial for *Psychiatric Times*. Having read through the work groups' summaries and various articles about the DSM-V, Frances declared that "The work on DSM-V has, so far, displayed an unhappy combination of soaring ambition and remarkably weak methodology."²²

"First," he wrote, "let's expose the absurdity of the DSM-V claim that it will constitute a 'paradigm shift' in psychiatric diagnosis. . . ." He went on to argue that the underlying science of psychiatry has not advanced enough to merit the kind of extreme makeover proposed by the DSM-V officials:

There can be no dramatic improvements in psychiatric diagnosis until we make a fundamental leap in our understanding of what causes mental disorders. The incredible recent advances in neuroscience, molecular biology, and brain imaging that have taught us so much about normal brain functioning are still not relevant to the clinical practicalities of everyday psychiatric diagnosis. The clearest evidence supporting this disappointing fact is that not even one biological test is ready for inclusion in the criteria sets for DSM-V.

He then systematically attacked every aspect of the paradigm shift. He said that the idea of adding symptom rating scales was

poorly conceived because busy clinicians would balk at the extra paperwork. He panned most of DSM-V's proposed changes in diagnostic criteria, arguing that the evidence in support of these was slim and that the new definitions would make it too easy to diagnose patients. Two examples: a proposal for a "prepsychotic" category to identify people who might in the future develop schizophrenia, and one for "mild cognitive impairment" to identify individuals who might go on to develop Alzheimer's disease.

The result of these broadened categories, he argued, "would be a wholesale imperial medicalization of normality that will trivialize mental disorder and lead to a deluge of unneeded medication treatment—a bonanza for the pharmaceutical industry but at a huge cost to the new false positive 'patients' caught in the excessively wide DSM-V net."

Such arguments were not exactly new—Christopher Lane and others had been making them for years. But Frances's editorial was devastating because of who Allen Frances was. He was not a sociologist, or a literature professor, or a member of an antipsychiatry sect such as Scientology. He was the man who had overseen the version of DSM currently being used by millions of clinicians throughout the world. He was the establishment, and he was turning the establishment on its head.

Soon after this editorial was released, Jane Costello, a superstar in the study of child psychiatry at Duke University, announced she was resigning from her DSM-V work group. She cited essentially the same problems outlined by Frances.²³

Suddenly, it appeared that DSM-V was imploding. In an effort to control the damage, the APA leadership published a rebuttal to Frances. Inexplicably, it concluded with a personal attack on Dr. Frances, accusing him of being motivated by greed, because a book he had coauthored on DSM-IV would not be reissued after DSM-V.²⁴ But Frances told the *Boston Globe* that these royalties never amounted

to more than \$10,000 per year.²⁵ It seemed, to say the least, unlikely that a world-famous psychiatrist would have written such a professionally risky editorial in order to maintain a \$10,000/year sinecure.

As this book was in press, the DSM-V was still scheduled for publication sometime in 2013. It looks as though it will include no paradigm shift after all. During a phone interview, Regier told me that their initial hope of adding the neurobiological criteria to the diseases would not happen. "It's not clear that there is enough evidence," he said.²⁶

But still unanswered is whether certain diagnoses will be substantially broadened, and whether Dr. Frances's concern that it will be a bonanza for the pharmaceutical industry is true. There's no question that fortunes can be made based on seemingly minor additions. For example, the DSM-V work group on neurocognitive disorders is considering adding a new diagnosis called "mild cognitive impairment" (MCI), which is a kind of pre-dementia category. These are patients who complain of poor memory that is not severe enough to qualify for the diagnosis of dementia. But they are at high risk: about 10 percent of patients with MCI develop dementia per year.²⁷

If MCI became a full-fledged DSM diagnosis, the results could be positive or negative, and probably a little of both. On the one hand, patients with significant memory problems could be given a diagnostic label and a better sense of their prognosis. For some patients and family members, even this little bit of knowledge is reassuring. On the other hand, there is the danger of over-diagnosis. A certain degree of memory loss is normal with aging, and most older people with absentmindedness have a benign condition termed "age-associated memory impairment," and are at no higher risk for dementia.²⁸ Once MCI gains a foothold in DSM-V, doctors are likely to look more zealously for the disorder and may generate false positive diagnoses. And once patients receive this diagnosis, they are likely to receive a trial of an anti-dementia drug (such as

Aricept) even though such drugs have not been shown to prevent dementia in MCI patients.²⁹ Pharmaceutical companies, when motivated by the scent of a vast new market, have proven themselves adept at trumping up meager findings in order to convince doctors to prescribe their drugs.

The DSM and pharmaceutical companies have long been engaged in a symbiotic dance, with each partner supporting the other. The proliferation of diagnostic labels has proved crucial for the growth of the pharmaceutical industry. When a new diagnosis is published, drug companies flock to treat potential new customers, in a psychopharmacologic land grab. In turn, the DSM brand is strengthened, because drug companies will promote the new condition in their advertising (they will often call this "medical education"), having the effect of encouraging clinicians to purchase the latest version of the manual.

The profusion of diagnoses has unquestionably yielded benefits, encouraging companies to develop new drugs for real conditions. Before DSM-III, for example, if a drug company wanted to test a new compound for anxiety, it would enroll patients diagnosed with "anxiety neurosis," which would yield a hodgepodge of patients with differing symptoms, such as panic disorder, generalized anxiety disorder, and PTSD. If a drug worked for the entire group, it was not clear which condition it targeted the best. DSM-III provided the criteria researchers could use to enroll only patients with, say, panic disorder into a drug trial. This advance, in turn, meant that companies could speed up the process of winning FDA approval of drugs for psychiatric disorders.

Overall, I believe that the development of these new drugs was a good thing, because the treatments available at the time (mainly psychoanalytic therapy) could do little to treat these symptoms. Through the 1980s and 1990s, drugs were developed that were effective for a range of problems, including depression, anxiety disorder,

ders, and schizophrenia. But gradually, the pharmaceutical industry became turbocharged, and began feeding off of the new diagnostic labels being defined by DSM committee members.

The best example of this is the progression of “me-too” drugs, especially in the category of the Prozac-like drugs, designated SSRIs. After Prozac’s success, other companies created their own compounds that were minor molecular variations. Working off of the new DSM diagnoses, they paid for clinical studies showing that their SSRI was effective not only for depression, like Prozac, but also for some other disorders. GlaxoSmithKline, for example, conducted studies showing that its SSRI, Paxil, was effective for depression, panic disorder, obsessive compulsive disorder, generalized anxiety disorder, post-traumatic stress disorder, and social anxiety disorder.³⁰ Each new indication was accompanied by expensive advertising campaigns touting yet another reason to prescribe Paxil rather than one of its competitors. In reality, all psychiatrists have come to realize that all the SSRIs—there are now about ten on the market, depending on how you categorize a particular drug—work pretty much equivalently, regardless of which formal “indications” the FDA has approved.

In the next two chapters, I will explore how psychiatrists think about the drugs we prescribe, and how our conceptions and our practices have been manipulated by drug company marketing strategies. Unfortunately, we know a good bit less about what we are doing than you might think.

Chapter 4

How Medications Became the New Therapy

As the psychopharmacologist and historian David Healy has written, “Specific diseases are of no use without specific cures.”³¹ The cures have come to us in the form of an avalanche of medications from pharmaceutical companies, and in response, since the mid-1990s, psychiatrists have gone on a binge of drug prescribing unprecedented in history.

In 1996, 13 million Americans were taking an antidepressant; nine years later, in 2005, that number had more than doubled, to 27 million. One in ten Americans over the age of six is now taking an antidepressant.³² Other mind medications are on the rise as well. The use of sleeping pills doubled from 2000 to 2004, and in 2006 it was estimated that 8.6 million Americans used the medications regularly.³³ Stimulants like Ritalin and Dexedrine are also a growth industry, with 5 percent of American children taking stimulants every day.³⁴ When stated in such bald terms, these figures sound like a call to arms, but why should they? Prescriptions of new medications for diabetes, coronary artery disease, and infectious diseases have also