

# Good Science or Good Business?

by DAVID HEALY

In the 1950s, estimates of the incidence of depression were fifty people per million; today the estimate is 100,000 per million. What was once defined as “anxiety” and treated with tranquilizers in the wake of the crisis of benzodiazepine dependence and the development of selective serotonin reuptake inhibitors became “depression.” And as SSRIs have been shown to be effective for treating other nervous conditions, such as panic disorder, estimates of their frequency have increased markedly as well. *Disease* increasingly means whatever we have a reimbursable treatment for.

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When *Listening to Prozac* emerged in 1993, it was one of the few books dealing with psychiatry to become an international best-seller since Freud's and Jung's works and the only book on psychopharmacology ever to do so. The book dealt with the effects of an “antidepressant” on conditions that often looked more like states of alienation than classic depressions. For many, this was their first awareness that antidepressants were drugs distinguishable from minor tranquilizers. For others, Peter Kramer's book and the notion of cosmetic psychopharmacology that it introduced raised interesting ethical and philosophical dilemmas. But the argument here is that the attraction of the book has depended on a series of engineered transformations in the way we think about mental well-being. The “alienation” Prozac and similar therapies “treat” has very commonly been defined in terms of the interests of the medico-pharmaceutical complex, and the arguments on offer about the merits of Prozac look more like descriptions of the interests of their proponents than dependable accounts of reality.

The interface between mental health and alienation traces to the emergence of psychodynamic therapy at the turn of the century, but this new industry remained at one remove from psychiatry until the 1950s. While the therapists took charge of such problems as alienation, psychiatrists dealt with those suffering from full-blown psychoses.

In the interim, there was considerable recourse to do-it-yourself pharmaco “therapy” that employed alcohol, opiates, bromides, and barbiturates to manage community nervousness (that is, nervous conditions that do not lead to hospitalization), but this use, unconstrained by a therapy establishment, gave rise to little talk of alienation among philosophers. Indeed one can wonder whether many philosophy departments would be able to function without alcohol to facilitate social intercourse.

When imipramine, the first antidepressant, was introduced, clinicians and pharmaceutical company executives could see little rationale for it. The frequency of affective disorders appeared vanishingly low and these conditions responded to antipsychotics or ECT. Clinicians used the antidepressants sparingly,<sup>1</sup> and the very word “antidepressant” only begins to appear in dictionaries in the mid-1980s. Unlike the antipsychotics, the antidepressants had no clear niche. However, they did seem capable of making some difference to a large number of people, even if those people might have to be persuaded that they needed this difference in their lives. As early as 1958, Roland Kuhn, the discoverer of imipramine, had noted that some sexual perversions responded to imipramine and that many patients, when they recovered, felt better than well.<sup>2</sup> Such transformations opened up significant philosophical and ethical issues—claims now strongly suggestive of Kramer's agenda. But whereas Kramer's book became a runaway best-seller, Kuhn's speculations had minimal impact. The philosophers who were excited by the new psychotropic compounds in the 1950s and are now interested in neuro-

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science and Prozac were not interested in imipramine.

### Market Development

The developmental trajectory for the antidepressants was largely determined by a critical external event—the thalidomide disaster. The public reaction to the birth defects caused by thalidomide, which had been taken by pregnant women to combat “morning sickness,” led to the 1962 Food and Drug Act amendments, which channeled drug development toward clear diseases. Drug availability was restricted to prescription-only medicines, placing it in the hands of individuals who supposedly would make drugs available for problems stemming only from diseases rather than for those stemming from other sources. These developments radically changed psychiatry, first by putting a premium on “categorical” rather than “dimensional” models of disease, so that psychiatrists were more likely to treat diseases as conditions that patients either have or lack rather than have to some degree, and second because prescription-only status brought nervousness within the psychiatric ambit.

Initially, the straitjacket of the 1962 amendments had the outcomes intended. But if drugs are made available only for diseases, it was perhaps predictable that there would be a mass creation of disease. There has been, and these developments shape our perceptions of how alienation is being managed. In the 1950s, it was thought that only fifty people per million were depressed. Nowadays no one blinks on being told that depression affects over 100,000 per million and that it leads to more disability and economic disadvantage than any other disorder.<sup>3</sup> But this change plainly requires a major change in our view of what constitutes disease. If 10 to 15 percent of the population is depressed, the label “disease” does not make sense if understood in terms of the biological disruption that bacterial infections produce. What is meant

can be grasped only if the “disease state” is framed in terms of temperamental factors and only if what is aimed at is a state of comparative well-being rather than cure.

Oddly enough, the widespread acceptance of our views of depression conceals the process by which they were changed. When first faced with the question of what community nervousness is, the psychiatric profession and the pharmaceutical industry understood it in terms of anxiety, and they resorted to Valium and other anxiolytics to treat it. This led to the first debates about the ethics of treating “problems of living” in this way.<sup>4</sup> In the West, however, the 1980s crisis surrounding benzodiazepine dependence led to the eclipse of both the minor tranquilizers and the whole notion of anxiolysis. This ushered in the antidepressant era. In contrast, in Japan, where dependence is less of a problem, the anxiolytics remain the most widely used drugs for nervousness and the antidepressant market remains small—in fact, Prozac is unavailable.

Depression as it is now understood by clinicians and at street level is therefore an extremely recent phenomenon, largely confined to the West. Its emergence coincides with the development of the selective serotonin reuptake inhibitors (SSRIs), which in the mid-1980s appeared capable of development as either anxiolytics or antidepressants.<sup>5</sup> Since their initial launch as antidepressants, various SSRIs have been approved for the treatment of panic disorder, social phobia, post-traumatic stress disorder, obsessive-compulsive disorder, and other anxiety-based conditions. In a number of these disorders, the SSRIs are more effective than they are in depression. Indeed, it has not been possible to show that Prozac is effective in classic depressive disorders. Worse, there is some evidence that far from reducing rates of suicide and disability associated with depression, antidepressants may actually increase them. Prozac and related drugs are prescribed to over four million chil-

dren and teenagers per annum in the United States, yet a preponderance of evidence suggests that such prescriptions are not warranted.<sup>6</sup>

The designation of Prozac as an antidepressant means that some efficacy in some milder depressions can be shown for this compound and it is accordingly not illegal to market it as a treatment for depression, but the fact that Prozac “works” for some people does not mean that they have classic depression. That it was marketed this way stems from business rather than scientific calculations.<sup>7</sup>

Changes in the way we think about problems of living are not restricted to depression. The research demonstrating that SSRIs could be useful for treating other nervous conditions has been associated with marked increases in estimates of their frequency as well.<sup>8</sup> Obsessive-compulsive disorder has increased a thousand-fold in apparent frequency. Panic disorder, a term coined in the mid-1960s and first appearing in diagnostic classification systems in 1980, has become one of the most widely recognized psychiatric terms at street level. Social phobia, all but invisible until the 1990s, now appears to affect the population in such epidemic proportions that the launch of Paxil as an anti-shyness agent was a media event.

These changes have very likely been brought about by the pharmaceutical industry itself, through its highly developed capacities for gathering and disseminating evidence germane to its business interests. The methods that might have this effect include convening consensus conferences and publishing the proceedings, sponsoring symposia at professional meetings, and funding special supplements to professional journals. The industry may also establish and support patient groups to lobby for treatments. The claim here—though defended elsewhere—is that these and other techniques for marketing information are sufficiently well developed that significant changes in the mentality of both clinicians and

the public can be produced within a few years.<sup>9</sup> In effect, the industry has educated prescribers and the public to recognize many other kinds of cases as depression.

These changes are facilitated by a broader social shift. When dynamic therapies occupied the citadels of orthodoxy in psychiatry, their terminology leaked out into popular language. A variety of terms were used in ways that technically were wholly inaccurate but that nevertheless became part of the way in which we thought of ourselves and conceptualized alienation. Recently, the psychobabble prevalent during much of the century has begun to give ground to a newly minted biobabble. A rootless patois of biological terms—"low brain amines," for example—has settled into the popular consciousness, with consequences for our self-conception that can only be guessed at.<sup>10</sup>

Possibly, Prozac's success has also depended partly on a lack of information. Prozac has been shown to "work" using clinician-based disease-specific rating scales, but when patient-based, nonspecific quality of life instruments have been used, it has not been shown to work for depression—although this information has not seen the light of day.<sup>11</sup> Current methods to estimate the side effects of drugs in clinical trials actually underestimate them, according to some tallies, by a sixfold factor.<sup>12</sup> Finally, the SSRIs have been sold on the back of a claim that the rate of suicide is 600 per every 100,000 patient years. But this is the rate for people with severe depression, for which Prozac does not work. The rate for primary care depression is on the order of 30 out of every 100,000 people. Yet in these populations, suicide rates of 189 for every 100,000 on Prozac have been reported.<sup>13</sup> Thus there are good grounds to believe that Prozac can trigger suicidality. The pharmaceutical companies are not investigating, however; one wonders whether they are receiving legal advice echoing that given to the tobacco companies, that any investigation of these

issues may increase product liability. From this vantage point, Prozac might seem better cast as a symbol of the alienation that large corporations can visit on people rather than as a symbol of the "treatment" of alienation that a psychotropic agent can bring about.

### **Lifestyles and the Disease Model**

The public perception of Prozac, as shaped by *Listening to Prozac*, was that the drug had been rationally engineered, in the sense that it had been developed so as to achieve highly reproducible clinical outcomes. If it is important that a drug be rationally engineered, it seems clear that Kuhn's discovery of cosmesis, in con-

trast to Kramer's, could not have gone anywhere.

However, Kramer's mythic account of the development of Prozac was mistaken. It was perhaps prophetic, since neuroimaging technologies, pharmacogenetic techniques, and other novel strategies will make the development of psychotropic drugs increasingly rational in this industrial sense, but none of this applied to Prozac. While Prozac works for some people, it has not been possible to offer any guarantees as to the quality of clinical outcomes when using it. Lacking such guarantees does not matter as much in treating genuine disease, since when patients are in danger, even doing something risky is by consensus preferable to doing nothing. But poor outcomes are much less tolerable in the management of less severe conditions. Thus a disease model offers pharmaceutical companies and clinicians a

valuable escape from quality standards.

A disease model offers other advantages to pharmaceutical companies. It acts powerfully to legitimate drug-taking, allowing Prozac, for example, to escape the flak that Valium drew in the 1970s. And it can function as a means of resolving problems about equitable access to health resources, since it is widely accepted that there are greater difficulties with inequities in health care than with inequities in the access to computers or digital televisions.

Prozac is of course only one of a growing number of agents that modulate lifestyles rather than cure diseases. Viagra is another good example of this trend. Viagra's designation as a lifestyle agent depends in good part on the reliability with which the in-

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tended responses can be elicited. What is interesting about Viagra is that we have had other drugs for two decades now that have comparable effects on sexual function. The SSRIs may have weak and unpredictable effects on depression, but they can reliably delay orgasm, and other antidepressants can advance it.<sup>14</sup> Thus we have had the capacity to "engineer" sexual performance for some time; the pharmaceutical companies have simply not marketed pills for such uses, presumably because they were uncertain about the acceptability of a "lifestyle market" for their wares.<sup>15</sup> Seen against this background, the promotion of Viagra marks an important turning point in the way drugs are developed.

In general, clinical therapeutics is increasingly comprised of a series of domains removed to varying degrees from the management of bacterial infections. The provision of oral con-

traceptives on a prescription-only basis is notionally underpinned by a disease model. Hormone replacement therapy is likewise presented as treatment for a disease. "Treatments" for baldness, age-induced skin changes, obesity, and a range of other lifestyle agents wait in the wings. All of these raise the question of what qualifies as a disease. In recent history, a disease has been thought of as an entity established by an underlying biological lesion. Previously, illnesses were anything that made the individual feel less well, a definition which potentially included halitosis. Latterly, the emergence of agents that can modify natural variations in hair loss or ejaculatory latency push us closer to making explicit one of the currently implicit but increasingly important definitions of disease, which is that it is, in practice, something that third-party payers will reimburse on.

Before 1962, tonics flourished along with treatments for halitosis and other problems of living. Cyproheptadine, an imipramine-like agent, which reliably improves appetite and sleep and less reliably cures depressions, was on sale as a tonic. The 1962 amendments required redesignation of agents like this as antidepressants rather than tonics, but in many ways they might have had greater public acceptability if classified as tonics, a usage hallowed by centuries of practice rather than as

antidepressants, since as drugs they quickly became associated with risks of addiction. Would we be talking about alienation if it were over-the-counter tonics rather than prescription-only antidepressants that were involved—or if we were, would the public take our debate seriously? Could it be that much of the current debate is predicated on a combination of pseudoscientific mystique and regulatory artifact? Consider in this connection one of the dilemmas raised by Kramer: because of its prescription-only status, Prozac raises special moral problems for the physician, who is now called on to decide whether it would be a good thing to reduce the general level of melancholy in the community, with the consequent loss of spirituality or creativity that might go with that.

These dilemmas would be transformed if the power to make these decisions were returned to the consumer. We may be unwittingly alienated choosing to purchase automobiles, but we would certainly feel alienated if it were the prerogative of the automobile salesmen to decide which brand of vehicle we should get.

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