Keynote Address 4th International Conference on Social Work in Health and Mental Health Quebec City, May 2004

NEEDED: CRITICAL THINKING ABOUT PSYCHIATRIC MEDICATIONS

David Cohen, Ph.D.

Professor
School of Social Work, College of Health and Urban Affairs
Florida International University, Miami, Florida 33199 USA
david.cohen@fiu.edu

In everyday discourse the word "treatment" is synonymous with "medication," because the place of psychotropic or psychiatric medication in the mental health system is pivotal. For the past 50 years, physicians in the West have been prescribing psychotropic drugs systematically to hundreds of millions of people to alter undesirable and disruptive emotions and behavior. In the 1980s, with the advent of Prozac (fluoxetine), biological psychiatry was finally consecrated as the reigning school of thought in mental health. Anyone could now confidently attribute mental illness to an imbalance in neurotransmitters. Since then, members of all helping professions, leaders of science, opinion and politics, the media, the educational and the justice systems, and the military have sanctioned the use of prescribed mind- and mood-altering drugs as the first resort when people face any crisis or distress. For the treatment of every single psychological afliction in men and women, in all ethnic groups, from the toddler to the aged, taking psychotropic drugs is now the cornerstone remedy, all other efforts secondary. [Note 1]

Despite the reliance on psychopharmaceuticals, however, not even modest improvements in the incidence, prevalence, relapse rate, duration, or long-term outcome of *any* condition routinely treated today with psychotropics, such as depression and schizophrenia, can be discerned (Cohen, 1997a; Healy, 1997; Kessler et al., 2003; Research Triangle Institute, 2002; Whitaker, 2002). On the contrary, despair, distress, and dysfunction are regularly announced to be increasing (and untreated) in the affluent West and throughout the world (WHO Mental Health Survey Consortium, 2004).

The pharmaceutical industry, however, has become the planet's most profitable (Fortune, 2000). Psychotropic drugs now usually rank second or third among the most prescribed pharmaceuticals. In 2002, sales of prescribed psychotropics in the USA exceeded \$37 billion. That year, world sales of just antidepressants exceeded \$17 billion and three psychotropics were among the world's ten top-grossing pharmaceuticals (IMS Health, 2003). One of them, the antipsychotic Zyprexa (olanzapine), had generated \$13.5 billion in sales (over 20 times its initial investment) after only 6 years on the market. These numbers help explain why in 2001 eight of the nine largest drug companies spent more on advertising and promotion (\$19 billion in the US) than on research ("New 2001 data shows," 2002). That last staggering sum also explains why the pharmaceutical industry's influences "extend to federal regulatory agencies, professional organizations, medical journals, continuing medical education, scientific researchers,

media experts, and consumer advocacy organizations" (Antonuccio et al., 2003, p. 1028). In sum, the monetary incentives for the drug industry to manipulate the "science" that legitimizes the commerce may be irresistible.

The Latest "Crisis" in the Mental Health System

Over the past year, media and scientific reports have shed unprecedented light on a grave practice undermining public health: drug companies' concealment of unfavorable findings from clinical drug trials. This means that published reports about drug trials are not credible, as sponsors censor negative data and researchers actively or passively help them. Critical scholars have described this problem for decades (e.g., Simes, 1987), but recent journalistic interest about antidepressant trials involving children has provided unprecedented revelations about how corporate, governmental, and academic actors work together to produce "publication bias," a form of scientific and consumer fraud (Chalmers, 1990). Some revelations are clear enough that as of this writing, in June 2004, the Attorney General of the State of New York filed a lawsuit against GlaxoSmithKline (formerly SmithKline Beecham) for deliberately working to conceal the failure of its drug Paxil/Seroxat (paroxetine) to demonstrate a benefit for children in clinical trials (Harris, 2004a). Paxil had worldwide sales of \$4.97 billion in 2003 (Kondro & Sibbald, 2004).

As GlaxoSmithKline initially responded in its defense, negative data were not concealed: they were submitted to the Food and Drug Administration (FDA) and other agencies charged with ensuring the safety of drugs and approving their marketing. However, in April 2004, members of the United States Congress had asked FDA officials to explain not only why they did not act on data in their possession — linking antidepressants to increased violent and suicidal behavior in depressed children — but why they also forbid the FDA's own principal reviewer from making public his epidemiological report confirming these risks (Harris, 2004b; Shogren, 2004; Waters, 2004).

That same month, both the British Medical Journal and the Lancet published metaanalyses of pediatric antidepressant clinical trials, which for the first time included some of the unpublished data. In this more complete portrait, and in apparent stark contast to conclusions found in individual trials published in US medical journals, antidepressants were shown to have no effectiveness over placebo pills, and to induce an excess rate of adverse effects, some quite serious. In an accompanying editorial, Lancet editors stated: "The story of research into selective serotonin reuptake inhibitors (SSRI) use in childhood depression is one of confusion, manipulation, and institutional failure" ("Depressing Research," 2004).

Independent consumer advocates relate this confusion, manipulation, and institutional failure to financial conflicts of interest among medical researchers, the mass media, and within governement agencies like the FDA and the National Institutes of Health (e.g., Sharav, 2003, 2004). Although United States Federal regulations generally prohibit the FDA from using experts with financial conflicts of interest, the FDA had waived that requirement over 800 times between 1998 and 2000, and over half the experts on FDA Advisory Panels had financial ties with the companies most affected by the decisions taken (Cauchon, 2000). For its part, the NIH in 1995 allowed its "scientists to spend unlimited time consulting for outside employers, with no ceiling on the resulting income," according to the Los Angeles Times (Wilman, 2004). An earlier report

from that same newspaper revealed rampant financial conflicts of interest, with NIH institute directors augmenting their already substantial salaries with hundreds of thousands of dollars from pharmaceutical companies on taxpayer time.

More indicative of an extraordinary slant toward industry, the FDA intervened with a Federal judge's order in August 2002 requiring GlaxoSmithKline to stop advertising that "Paxil is non habit forming" because the commercials were "misleading and created inaccurate expectations about the ease of withdrawal" ("Judge: Paxil ads," 2002). Despite an abundance of reports on severe withdrawal symptoms constraining users to remain on drugs like Paxil and Zoloft, the FDA's own chief counsel — formerly best known for suing the FDA on behalf of the pharmaceutical industry — argued that it alone was authorized to determine what should be disclosed in drug advertisements (Kranish, 2002). In October 2002, the British Broadcasting Corporation (BBC) documentary *Panorama* provided compelling "anecdotal" evidence of patients' extreme difficulty in withdrawing from Paxil. The BBC received 67,000 phone calls and 1,500 emails providing additional evidence of Paxil-induced severe withdrawal symptoms. Shortly thereafter, the "official" rate of Paxil-induced withdrawal symptoms was revised upward 500-fold by GlaxoSmithKline, from 0.05% to 25% (Medawar & Hardon, 2004).

The deceitful promotion of the newer "atypical" antipsychotic drugs among state governments in the US has also been revealed over the past year, due to a whistleblower's release of internal documents. According to the New York Times:

Since the mid-1990's, a group of drug companies led by Johnson & Johnson, has campaigned to convince state officials that a new generation of drugs ... is superior to older and much cheaper antipsychotics.... The campaign has led a dozen states to adopt guidelines for treating schizophrenia that make it hard for doctors to prescribe anything but the new drugs. That, in turn, has helped to transform the new medicines into blockbusters.

Ten drug companies chipped in to underwrite the initial effort by Texas state officials to develop the guidelines. Then, to spread the word, [these] companies paid for meetings around the country at which officials from various states were urged to follow the lead of Texas....

Sales of the new antipsychotics totaled \$6.5 billion [in 2003] ... About a third of those sales went to state Medicaid programs, whose costs have ballooned with the adoption of the new drugs. Texas, for example, says it spends about \$3,000 a year, on average, for each patient on the new drugs, versus the \$250 it spent on the older medication. (Peterson, 2004)

Following another whistleblower's revelations, Pfizer, the world's largest drug company, agreed in May 2004 to pay \$430 million after pleading guilty to a charge of criminal fraud in the promotion of Neurontin (gabapentin), an adjunct anti-seizure drug, for indications such as bipolar disorder, migraine, back pain, ADHD, and depression, that were not approved by the Food and Drug Administration. Physicians recruited and paid by Pfizer systematically touted Neurontin's wonders for indications unapproved and unstudied. Ninety percent of Neurontin's sales, which last year amounted to \$2.7 billion dollars, were for these indications (Armstrong & Mathews, 2004).

Finally, as these lines were written, *The Guardian* reported that Italian police asked that nearly 5,000 people — including more than 4,000 doctors and 273 employees of GlaxoSmith Kline — be put on trial for giving and accepting bribes to encourage the

prescription of various drugs. A British-based pharmaceuticals analyst was quoted as saying that "In parts of Europe, these things [cash and other enticements] are aboslutely rife" (Hooper & Stewart, 2004).

In their recent book recounting the antidepressant case study, Medawar and Hardon (2004) conclude with remarks that probably apply to all psychopharmaceuticals and perhaps to all medications today:

Are medicines out of control? The question reflects concerns about endemic and pathogenic institutional secrecy; rampant conflicts of interest; systematic manipulation of "scientific" evidence and perversion of understanding; the marginalization of dissenting, inconvenient and unwanted views; official indifference to essential and valuable evidence from patients; the rising dominance of trade imperatives and the sickening promotion of disease awareness; the emphasis on pharmaceutical innovation as the source of health solutions; the size and cost of the Pharmas in relation to their health value; the inadequacy of self-regulation and the lack of democratic accountability—and the consequences of this for health for one and all." (p. 222).

This is a grave indictment indeed, a description of a mental health system completely at odds with its self-described mission of providing care to suffering "consumers" and scientific guidance to society. It recalls previous indictments of previous system-wide crises in mental health, and, for us, calls into question the roles of social workers in contributing to the dysfunction.

Twenty or thirty years ago, social workers merely referred patients for a medication evaluation. Today, their tasks include recommending that physicians prescribe drugs to clients, monitoring medicated clients' states, persuading or coercing clients to follow prescribed drug regimen, facilitating clients' understanding of drug effects, and, much more rarely, assisting clients to stop taking drugs. Case managers of clients diagnosed with severe mental illness and residing outside hospitals may count and sort medication boxes, bring drugs to clients' homes and watch while clients take them, and drive clients to and from clinic appointments where medication is the overriding issue of interest (Floersch, 2002). These activities of social workers enable the taking of medications by many clients within a service system that essentially revolves around "medication compliance."

Critical Thinking About Psychiatric Drugs

This address began with a reminder of the gap between widespread psychotropic drug prescriptions and the tested evidence base to justify them. But little of this is new. All major schools of thought in mental health (biological, psychoanalytic, behavioral and cognitive) have overstated their scientific claims to justify their political and cultural power. Most ideas and their associated practices touted as reform, progress or enlightenment at one moment in the history of mental health interventions were later repudiated as misleading, damaging or even plainly fraudulent (e.g., Braslow, 1997; Dolnick, 1998; Johnson, 1990; Torrey, 1992). The history of mental health care is the history of mistakes about mental health care; the history of physical and mental harm caused to ordinary people seeking help from approved experts, therapies, and schools of thought (Diekelmann & Kavanagh, 2002; Illich, 1976; Morgan, 1983). The history of healing confirms healers' capacity to harm, which is the reason for the helping

professions' best-known ethical precept, "First, do no harm."

Helping professionals who understand this assume the responsibility to choose carefully which ideas and practices merit their allegiance. These professionals are keenly sensitive to the harm that they may cause. This is "critical thinking," that which encourages us to step outside conventional ways of viewing something and to submit it to ethical, logical, and historical scrutiny (Gibbs & Gambrill, 1999; Paul & Elder, 2002). Today's conventional theory—that people behave in ways unapproved or unacceptable because they have something wrong with their genes or brain and that this problem needs first to be fixed with drugs—is just what needs more scrutiny.

But are we preparing our students for this task? Reviewing syllabis of required graduate psychopathology courses in 58 different MSW programs in the US, Lacasse and Gomory (2003) found a disconcerting lack of exposure of students to critical views with respect to four key topics: concepts of mental disorder, reliability and validity of psychiatric diagnoses, biological etiology, and drug treatment. The authors conclude: "There is little evidence that graduate psychopathology courses cover viewpoints other than the most conventional and institutional — that of biomedical psychiatry" (2003, p. 383).

Yet, the need for social workers to develop a critical perspective on the use of psychiatric drugs is long past due. Unless social workers cease being second-hand users of biased studies and begin to generate basic knowledge about drugs, social work's claim to being a full-fledged mental health profession is dubious at best. And social workers' so far virtually unqualified support for psychotropic drug treatments may be, simply, unethical.

Should social workers not join physicians, neuroscientists, epidemiologists, and advertising companies in producing knowledge about drugs? Save a few exceptions, the current social work stance — a shifting mix of self-professed scientific ignorance yet zealous compliance with biological psychiatry — is hypocritical and cannot suffice any longer: all mental health professions are equally mired in the "psychopharmacy illusion," all have played a part in bringing us to the crisis. All must look afresh at how they can help to "lift the veils" and show how professional practice can minimize iatrogenic harm and narrow the mystifying expert-layperson divide.

One way to undertake this pressing intellectual task for social workers involved in health and mental health is to ask *basic* questions about psychopharmacology, and to test and refine answers to these questions that resonate with core values of this profession and the principles of scientific inquiry unsullied by economic or narrow professional interests. Bentley and Walsh (2002), in *The Social Worker and Psychotropic Medication*, cite the sufficient principles from the National Association of Social Workers' ethical code to sustain this endeavor: that social workers "strive to ensure access to needed information, services, and resources," "engage people as partners in the helping process," and, as they practice within their areas of competence, "strive to increase their professional knowledge and skills" (pp. 5-7).

The following sections present examples of some "basic questions" about biological psychiatry, psychopharmacology, and psychotropic drugs, and answers that might be developed for them.

What Does Biological Psychiatry Rest On?

Does the popularity of biological psychiatry rest on its success in providing validated answers to age-old conundrums about mental suffering and healing? For this author, the popularity rests on the simple facts that many people like to use drugs for reasons that are important to them, and that biological psychiatry provides culturally acceptable justifications for this use (Fancher, 1995). Using drugs to alter consciousness, to ease pain, to induce sleep or maintain wakefulness are ancient universal practices. Biological psychiatry exploits these ordinary desires with a medical/scientific rhetoric, currently that of the "biochemical imbalance." People hear, read, and are taught that psychotropic drugs are prescribed for them because their brain functioning is defective. Thus, laypersons and professionals come to believe and repeat that hopelessness and depression result from inadequate serotonin neurotransmission which is remedied by serotonin reuptake inhibitors (Johnson, 1999), or that restlessness and inattention in millions of American school children result from shrinkage of the frontal lobes and that stimulants "help brains grow" (Kurth, 2002). The reality is of course more complex: people experiencing psychological distress take drugs because they want to, or because others want them to, or because alternatives to drugs are presently expensive, timeconsuming, demanding, and less easily available.

Part of the problem with reductionist biological explanations is that they are commonly presented as obvious scientific facts although *none has been demonstrated* (Mental Health, 1999). In this way, their resemblance to discarded dogmas is striking. Earlier explanations, such as the all-powerful but undetectable unconscious, were initially useful to promote professional interests, scientific purposes, and humane reforms. However, as these constructs came to fashion entire societies' outlooks on deviance and distress, they only served to suppress intellectual and therapeutic innovation, and worse.

Does Prescribing Drugs Represent Progress in Mental Healing?

The idea that psychotropic drug treatment is an obvious advance over conversation remains one of the most uncritically accepted fabrications in mental health. After touch — which has been banned from the psychotherapeutic encounter — the most natural way to comfort someone in distress is to give that person something to swallow. Many professionals view prescribing a mood-altering drug as a modern or scientific way to treat emotional distress, but the practice is also a primal custom that resonates with our earliest experiences as powerless infants, and of course that perpetuates what was arguably a substance-rich evolutionary past for the human species (Sullivan & Hagen, 2002).

Throughout recorded history, licit and illicit healers have used licit and illicit substances to treat all ailments. In parallel, sick and suffering people have claimed benefits from using substances or treatments whether or not medical science could validate the claims (Szasz, 1974). For centuries, bleeding — now known to be extremely harmful — was sought by sufferers and administered by physicians. In sum, there is nothing inherently progressive about relieving psychological distress with drugs, as substance use and substance-seeking are human universals. Furthermore, individuals' experiences of medications as aids or cures often illustrate a dimension of healing that may have no reliable relationship to the properties of the particular medications.

What Are Drugs?

Psychotropic drugs are material substances that are ingested inside the body and, according to current ideas in neurophysiology, exert effects on the brain to alter feeling, behaving, and thinking. Drugs' material properties are essential for any understanding of drug effects. Yet, emphasis on material structure impedes discerning much of the significance of drugs in people's lives: their power as symbols. From an anthropological perspective, drugs might be seen as "charged objects" (like talismans, amulets, or sacraments) laden by humans with powers, hopes, and fears. Like diamonds reflecting light, the appearance of medications and perhaps even their "essence" changes depending on one's standpoint.

Socially-speaking, medications are (1) the primary strategy to treat disease; (2) an interface between patients and physicians; (3) triggers for personal change, leading some users to radically reinterpret their very sense of self; (4) tools of social control; (5) causes and consequences of medicalization; (6) reservoirs of badness ("dangerous drugs") or goodness ("approved medications") for mainstream society; and (7) vectors of globalization, given how few devloped countries sell most of the world's medicines to all the rest of the world's countries (Cohen et al., 2001). One could characterize medications in other ways, none of which would account for the totality of their effects, but each of which would add to our understanding.

In sum, drugs are powerful material objects but they are also socially grounded phenomena that are highly responsive to culture and history, producing "effects" that reverberate within and outside individuals' bodies to shape social relations in families, in groups, in institutions, and in societies.

Drugs or Placebos?

Modern medications are put forth as sophisticated products of rational and technological design, but they cannot detach themselves from their shadow: suggestion. To classify a compound as an "efficacious medication," the world's highest scientific and regulatory standards involve nothing more than comparing it to a pharmacologically *inert* substance, a placebo. Inert, yet not without the power to serve as a vehicle for humans' vital, innate potential for self-healing and repair.

When primed only with information (even deceptive) and expectation, a person can report as much or more improvement in symptoms of major depression than when taking a centrally active drug (the composition, effects, dose and administration of which have been studied for years). In re-analyses of the very best clinical trials of seven modern "antidepressants" (trials submitted to the FDA by manufacturers to gain approval to market the drugs), Kirsch, Moore, Scoboria, and Nichols (2002) revealed barely noticeable advantages of drugs over placebo. Antonuccio, Burns, and Danton (2002) believe that "It could be argued that the patients randomly assigned to placebo are the lucky ones, because they derive a benefit virtually comparable with the medication condition without the associated medical risks."

But how to capture the placebo effect without annulling it simultaneously? Perhaps a more "social" understanding is necessary:

All sorts of human beliefs, motivations and styles of organisation make medicines work as they seem to do. These factors are typically invisible, go largely unrecognized and have no other name. They go largely incognito... The fact that they have no collective name underlines that

their impact is generally unrecognised and therefore poorly understood. Probably the main reason is that the word placebo has come to stand for all the non-drug factors that affect treatment outcomes. It does not seem an appropriate word: it does not take into account of many non-pharmacological factors on treatment outcomes... Perhaps the word "placebo" should be abandoned, and "incognito" used instead?" (Medawar & Hardon, 2004, p. 175).

Even if defined simply as the patient's expectation, the placebo effect remains possibly the single most important factor in any self-reported positive psychotropic medication-induced change. However, because it is invisible and unpretentious (and unpatentable as placebo), its benefits can be claimed by competitors, and instead of investigating the power and nature of this vital human capacity and its relationship to individuals' places and roles in social contexts, it is often denigrated as amounting to "no treatment" or "nothing." The wider point here that should resonate with social workers is that the felt effectiveness of a treatment or a medicine has not just to do with the relationship between patient and doctor, or user and drug. Advertising, drug company sponsorship of clinical events — not to mention suggestion, faith, and hope — are also major factors in drug reputation and "effectiveness."

Drug Effects: Attributes or Properties?

Various names used to describe or classify drugs are metaphorical and change along with sociocultural changes. These names may be called *attributes*: characteristics or qualities rhetorically ascribed for persuasion. "Consciousness expanding" (ascribed in the 1960s to psychedelic drugs) now stands out as a notable example of a drug attribute. Less obvious but no less valid examples include "antipsychotic," "antidepressant," "mood stabilizer," "cognition enhancer," "addictive," and of course "medication." Other drug appelations resist socio-linguistic fashion and may be called *properties*. Properties refer to objectively validated drug effects ("sedative," "antiemetic," "anticonvulsant," "myorelaxant," etc.) that pharmacologists usually discover within weeks of systematically studying a substance for the first time. Properties rarely vary under typical conditions or across different species.

Many people, including many experts, confuse attributes and properties. It may be that some struggles of individuals and societies with drugs stem from the tendency to treat attributes of drugs as if they possessed concrete existence, all the while neglecting or dismissing the actual properties of drugs.

How Do Psychotropic Drugs Produce "Therapeutic" Effects?

No single theory in psychopharmacology addresses how drugs produce "therapeutic" effects. There is no theory of "drug response." This is because the perception of a drug effect as therapeutic depends on human motives within particular social contexts (Cohen & Karsenty, 1998).

Neuroleptic drugs produce abnormal movements in humans and animals, but how the abnormal movements of psychiatric patients on neuroleptics were initially labeled (or even noticed) and how they were acted upon depended on expectations of clinicians in mid-20th century mental hospitals (Cohen, 1997b). Whether sedation from a benzodiazepine is categorized as a "therapeutic effect" or an "adverse effect" has nothing to do with the pharmacology of benzodiazepines and everything to do with

what doctors and patients judge to be desirable at different times (Cohen & Karsenty, 1998). Whether indifference and lack of initiative in formerly depressed patients taking Prozac is labeled as "improvement" or "frontal lobe damage" depends on how long and how closely the patients and the clinician have been interacting (Hoehn-Saric, Lipsey, & McLeod, 1990). Whether submissiveness and cognitive overfocusing in a child taking psychostimulants is seen as "effectiveness in reducing off-task behavior" or "an expression of the continuum of stimulant toxicity" depends largely on teachers' expectations of children in a structured classroom.

Plausible hypotheses and reliable observations hint how drugs circulate in the central nervous system (CNS), altering neurotransmission and producing cascades of neurochemical alterations. However, short of postulating a pre-existing (but as yet undetected) "chemical imbalance" that causes undesirable changes in mood and behavior (the "mental disorder"), and that is in turn "corrected" by drugs, the conclusion seems inescapable: prescribed psychotropics are basically non-selective CNS depressants or stimulants (to use Julien's [1982] expression). If that is so, it is unrealistic not to expect drugs to impair or blunt emotional responsiveness, social sensitivity, and judgment, as all sedatives and stimulants do.

With prolonged drug use, as the exquisitely integrated brain alters its functioning and structures to adapt to the persistent disruption of neurotransmission, and as drug withdrawals induce further "neuro-cataclysms," emotional/cognitive/behavioral/physical impairments can become extremely complex and subtle (Breggin & Cohen, 1999). In the extreme, these impairments lead to "iatrogenic denial and helplessness" — a process where the patient is rendered less independent and discerning, and where patient and prescriber work together to deny the damage inflicted (Breggin, 1983).

Pharmacology might indicate how drugs trigger emotional/behavioral states, but it cannot answer questions such as: (I) How do non-specific psychotropic effects come to be desired or shunned, studied or ignored, categorized as "therapeutic" or "adverse" — and why would different participants in the prescription situation differ on what should count as "therapeutic" and "adverse"? (2) How and why do conceptions and definitions of therapeutic or adverse effects of particular drugs change over time? Only a "person-in-environment" perspective, coupled with a critical analysis of the goals of the treatment system, can shed light on these issues. These issues could be at the core of an independent understanding of medications by social workers.

Are Some Drugs Better than Others?

From a pharmacological point of view, one cannot explain why various drugs are available legally or not, considered beneficial or harmful, prescribed only or sold freely over-the-counter. Pharmacologically, one cannot account for the fates of two classical stimulants with nearly identical neurochemical effects: methylphenidate (Ritalin) and cocaine (Vastag, 2001). One is prescribed in several preparations to millions of children, its twin is cursed and its mere possession carries heavy legal penalties. Likewise, amphetamines were formally rejected decades ago by medical and law enforcement authorities throughout the world as likely to trap users into patterns of substance dependence and to trigger psychosis and violence after prolonged use at high doses (Grinspoon & Hedblom, 1975). No new findings about the pharmacology of amphetamines have emerged, but today, a mixture of three pure amphetamine salts marketed as Adderall is among the drugs on which spending in the US in 2003 exceeded

spending for antibiotics (Johnson, 2004).

Many other examples confirm that the fate of a psychotropic drug in society has little to do with its known and predictable effects and much to do with how legal and medical authorities might be affected by its widespread use. To complicate matters, these authorities change their minds on these matters, sometimes every decade. The unsettling truth is that approval by the FDA, prescription by doctors, promotion by manufacturers, and praise by clinicians and patients says *little* about a drug's "safety" or its "effectiveness." Future observers will completely ignore each of these factors when judging how the drug genuinely impacted those who took it.

How is Knowledge About Drugs Constructed?

Like "scientific" knowledge about oil and automobiles, "scientific" knowledge about medications is socially constructed and extremely receptive to the influence of money and power (Safer, 2002; Schulman et al., 2002). Some researchers labor tirelessly and sincerely to concoct inappropriate trial designs, to ignore blatant confounds, to write obscure prose, to publish unfounded claims about the medications they study, and to ignore conflicts of interests. Many journal editors work just as tirelessly to accept these products and pass them off as exemplars of scientific medicine (Relman & Angell, 2002). Other researchers are acutely aware of the bankruptcy of the "business-as-usual" style of psychopharmacotherapy studies but downplay their criticism, wary of negative repercussions on their careers (Healy, 2002). Still others actively grease this system's operation by signing "secrecy agreements" with drug manufacturers that withold essential information about drug effects.

In such a system, more politically- than scientifically-driven, how could officially designated experts be trusted to decide what counts as legitimate knowledge about drugs? Mostly because of the advent of the Internet, knowledge about drugs has to accommodate the voices of consumers in areas that psychopharmacologists have consistently ignored, downplayed, or denied outright, such as withdrawal effects (Breggin & Cohen, 1999). In my own practice, I treat medication users as experts and encourage them to generate formal first-person accounts of their medication use as a "drug experience" (Cohen, 2003).

Creating spaces for detached, creative, independent evaluations of pharmaceuticals takes on added importance because of the recent return, after more than 60 years of prohibition, of direct-to-consumer advertising of prescription drugs, and the recent availability of pharmaceuticals to almost anyone via Internet sites. The modern marketing of Ambien and Adderall, Paxil and Prozac, or Zyban and Zyprexa, confirms completely that prescribed medications are no longer — if they ever were — exclusive tools of medical practice: they are now sought, declined or offered on the basis of consumer preferences. And, given how consumer preferences are instilled and shaped in this advanced age of advertising and consumerism (Cohen, 1996; Cross, 1996), we should prepare for the not-too-distant time when admen, not doctors, once again become the sole intermediaries between us and our medications.

Conclusion

Basic questions about drugs are still worth asking, and especially worth asking from the varied perspectives and interests of different professions and disciplines. There is of course no guarantee that useful answers will be found. But if something is to be learned from the crisis in the legitimacy of *prescribing* psychotropic drugs as *medicines* that I and others claim exists today, it is that "problems arise not because [experts] don't know enough, but when they behave as if they do" (Medawar & Hardon, 2004, p. 182). It is not ignorance that causes our problems, it is the arrogance of claiming that basic theoretical and ethical controversies are solved.

Biological psychiatry, in an unholy symbiosis with the drug industry, has actively promoted the view that people's emotional problems are symptoms of diseases of the body (brain), usually resulting from genetic abnormalities. The number of social, economic, spiritual, psychological, and educational problems considered to be or treated as diseases has, needless to say, increased dramatically over the last quarter century — a trend commonly referred to as medicalization (e.g., Conrad & Schneider, 1992).

The unchecked medicalization of distress of course cannot have only positive implications: it also carries its share of intellectual mystification, iatrogenic injury, and sociocultural decline. Fully a quarter of the population is implied to be genetically deficient because affected with "diagnosable" or "treatable disorders" (*Mental Health*, 1999). In one of history's strangest social experiments, up to 15% of children in North America are given stimulants and other drugs to make them conform to schools' expectations. Long term psychotropic drug use can be shown to be detrimental for individual brains. Will it be shown to be detrimental for the species' evolutionary capacity? (Fukuyama, 2002; Nesse & Berridge, 1997) In human bodies, families, and groups, drugs only seem to blunt people's responses to stress — drugs neither banish stress or the sources of stress, nor do they enhance people's capacity to cope with stress (Mirowsky & Ross, 2003).

It goes without saying that people suffer and undoubtedly, ways exist for people whose lives have been disrupted by the slings and arrows of fate to benefit from the psychological and behavioral alterations produced by psychotropic drugs. However, the all-too-commonly-accepted views that medication can solve distressed people's problems, or that medication should be the most easily and widely available intervention, need urgently to be re-evaluated and contextualized. In particular, it hardly seems possible today to use the findings of countless clinical trials in psychopharmacology to enlighten us about the potential benefits and psychological effects of drugs, or to inform us accurately about drugs' potential risks, and certainly not to suggest what might be "ideal" conditions for drug use in helping relationships.

In sum, the experts have failed the public and no one wishes to be held accountable. It is almost as if the entire edifice of psychopharmacotherapy must be torn down and rebuilt from scratch, with participation from anyone who wishes, as long as their contributions are transparent (since they cannot be guaranteed to be principled). The implications are numerous and enormous. Here is just one implication: it is time for more social workers to become seriously engaged in the critical evaluation and the reconstruction of the psychotropic drug treatment enterprise.

References

- Antonuccio, D. O., Danton, W. G., & McClanahan, T. M. (2003). Psychology in the prescription era: Building a firewall between marketing and science. *American Psychologist*, 58, 1028-1043.
- Antonuccio, D. O., Burns, D. D., & Danton, W. G. (2002). Antidepressants: A triumph of marketing over science? *Treatment and Prevention*, 5, article 25. Available on World Wide Web, http://journals.apa.org/prevention/volume5/pre0050025c.html
- Armstrong, D., & Mathews, A. W. (2004, May 14). Pfizer case signals tougher action on off-label drug use. Wall Street Journal, p. B1.
- Associated Press. (2004).
- Bentley, K. J., & Walsh, J. (2002). The social worker and psychotropic medication: Building effective collaboration between... (2nd edition).
- Braslow, J. (1997). Mental ills and bodily cures: Psychiatric treatment in the first half of the twentieth century. Berkeley: University of California Press.
- Breggin, P. R. (1983). latrogenic helpleness in authoritarian psychiatry. In R. F. Morgan (Ed.), The iatrogenics handbook: A critical look at research and practice in the helping professions (pp. 39-51). Toronto: IPI Publishing.
- Breggin, P.R., & Cohen, D. (1999). Your drug may be your problem: How and why to stop taking psychiatric medications. Cambridge, MA: Perseus.
- Cauchon, D. (2000, September 25). FDA advisors tied to industry. USA Today, pp. 1A, 10A.
- Chalmers, I. (1990). Underreporting research is scientific misconduct. JAMA, 263, 1405-1408.
- Cohen, D. (1996). Les "nouveaux" medicaments de l'esprit: Marche avant vers le passé? [The "new" mind drugs: A forward step into the past?] Sociologies et sociétés, 28, 17-34.
- Cohen, D. (1997a). A critique of the use of neuroleptic drugs in psychiatry. In S. Fisher & R. G. Greenberg (Eds.), From placebo to panacea: Putting psychiatric drugs to the test (pp. 173-228). New York: Wiley.
- Cohen, D. (1997b). Psychiatrogenics: Introducing chlorpromazine in psychiatry. Review of Existential Psychology and Psychiatry, 23 (1-2), 206-233.
- Cohen, D. (2001). How to detoxify from common illusions about psychiatric medications. Ethical Human Sciences and Services, 3, 207-211.
- Cohen, D. (2003). The psychiatric medication history: Context, purpose, and method. *Journal of Social Work in Mental Health*, 4, 5-28.
- Cohen, D. (in press). Clinical psychopharmacology trials: "Gold standard" or "fool's gold"? In S. Kirk (ed.), Mental disorders in the social environment: Perspectives from social work. New York: Columbia University Press.
- Cohen, D., & Karsenty, S. (1998). Représentations sociales des effets secondaires des anxiolytiques: Une étude comparative Québec-France. [Social representations of the side effects of anxiolytic drugs: A comparative Quebec-France study]. Research report submitted to the Research Branch, Ministry of Health & Municipal Affairs, France.
- Cohen, D., McCubbin, M., Collin, J., & Perodeau, G. (2001). Medications as social phenomena. *Health*, 5, 441-469.
- Conrad, P., & Schneider, J. (1992). Deviance and medicalization: From badness to sickness (2nd ed.). Philadelphia, PA: Temple University Press.

- Cross, M. (1996). (Ed). Advertising and culture: Theoretical perspectives. Westport, CT: Praeger.
- Depressing research. (2004). Lancet, 363, 1335.
- Diekelmann, N. L., & Kavanagh, K H. (Eds.). (2002). First, do no harm: Power, oppression, and violence in healthcare. Madison, WI: University of Wisconsin Press.
- Dolnick, E. (1998). Madness on the couch: Blaming the victim in the heyday of psychoanalysis. New York: Simon & Schuster.
- Fancher, R. (1995). *Cultures of healing: Correcting the image of American mental health care.*San Francisco: Freeman.
- Floersch, J. (2002). Meds, money, and manners: The case management of severe mental illness. New York: Columbia University Press.
- Fortune. (2000). How the industries stack up. Retrieved October 17, 2000, from http://www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc id=00001423
- Fukuyama, F. (2002). Our posthuman future: Consequences of the biotechnology revolution. New York: Farrar, Straus, and Giroux.
- Gibbs, L., & Gambrill, E. (1999). Critical thinking for social workers: Exercises for the helping professions. Thousand Oaks, CA: Pine Forge Press.
- Grinspoon, L., & Hedblom, P. (1975). The speed culture: Amphetamine use and abuse in America. Cambridge, MA: Harvard University Press.
- Harris, G. (2004a, June 3). Spitzer sues a drug maker, saying it hid negative data. New York Times, pp. A1, C4.
- Harris, G. (2004b, April 16). Expert kept from speaking at antidepressant hearing. New York Times, p. A-16.
- Healy, D. (1997). The antidepressant era. New York: Harvard University Press.
- Healy, D. (2002, February). Problems with antidepressants. Paper presented at the Institute of Psychiatry, London.
- Hoehn-Saric, R., Lipsey, J. R., & McLeod, D. A. (1990). Apathy and indifference in patients on fluvoxamine and fluoxetine. *Journal of Clinical Psychopharmacology, 10*, 343-345.
- Hooper, J., & Stewart, H. (2004, May 27). Over 4,000 doctors face charges in Italian drugs scandal. *The Guardian* (UK). Retrieved June 7, 2004 from http://www.guardian.co.uk/italy/story/0,12576,1225576,00.html
- Illich, I. (1976). Limits to medicine. Medical nemesis: The expropriation of health. Toronto: McClelland and Stewart Limited.
- IMS Health. (2003, February 28). 2002 world pharma sales growth: Slower, but still healthy. Retrieved June 16, 2003 from http://www.ims-global.com/insight/news_story/ 0302/news_story_030228.htm
- Jacobs, D., & Cohen, D. (1999). What is really known about alterations produced by psychiatric drugs? *International Journal of Risk and Safety in Medicine*, 12, 37-47.
- Judge: Paxil ads "misleading." (2002, August 21). CBS News. Retrieved April 15, 2004 from http://www.cbsnews.com/stories/2002/08/20/health/main519266.shtml
- Johnson, A. B. (1990). Out of Bedlam: The truth about deinstitutionalization. New York: Basic Books.
- Johnson, H. C. (1999). Psyche, synapse, and substance: The role of neurobiology in emotion, behavior, thinking, and addiction for non-scientists. Greenfield, MA: Deerfield Valley.

- Johnson, L. A. (2004, May 17). Behavior drug spending eclipses other youth meds. The Standard Times. Retrieved May 17, 2004 from http://www.southcoasttoday.com/daily/05-04/05-17-04/a05wn.htm
- Julien, R. M. (1992). A primer of drug action: A concise, nontechnical guide to the actions, uses, and side effects of psychoactive drugs (6th ed.). New York: Freeman.
- Kessler, R. A., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikanga KR, et al. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication. *JAMA*, 289, 3095-3105.
- Kirsch, I., Moore, T. J., Scoboria, A., & Nicholls, S. N. (2002). The Emperor's new drugs: An analysis of antidepressant medication data submitted to the U.S. Food and Drug Administration. *Prevention & Treatment*, 5, article 23. Available on World Wide Web: http://journals.apa.org/prevention/volume5/toc-jul15-02.htm
- Kondro W., & Sibbald, B. (2004). Drug company experts advised staff to withhold data about SSRI use in children: A 1993-1996 industry study showed that paroxetine was no more effective than placebo in treating pediatric depression. *Canadian Medical Association Journal*, 170, 783.
- Kranish, M. (2002, December 22). FDA counsel's rise embodies US shift. Boston Globe. Retrieved April 16 2004 from http://www.bostonglobe.com
- Kurth, J. (2002, December 12). Ritalin is safe—and it works. Research dispels fears that drug hurts kids, and finds that it actually helps brains grow. The Detroit Free Press-Retrieved December 12, 2002, from http://www.detnews.com
- Lacasse, J. F., & Gomory, T. (2003). Is graduate social work education promoting a critical approach to mental health practice? *Journal of Social Work Education*, 39, 383-408.
- Medawar, C., & Hardon, A. (2004). *Medicines out of control? Antidepressants and the conspiracy of goodwill.* London: Aksant Academic Publishers/Transaction.
- Mental health: A report from the Surgeon General. (1999). Washington: Office of the Surgeon General.
- Mirowsky, J., & Ross, C. E. (2003). *Social causes of psychological distress* (2nd ed.). Chicago: Aldine de Gruyter.
- Morgan, R. F. (Ed.). (1983). The iatrogenics handbook: A critical look at research and practice in the helping professions. Toronto: IPI Publishing.
- Nesse, R. M., & Berridge, K. C. (1997). Psychoactive drug use in evolutionary perspective. *Science*, 278(5335), 63-66.
- New 2001 data shows big drug companies spent almost two-and-one-half times as much on marketing, advertising, and administration as they spent on research and development. (2002). FamiliesUSA. Retrieved June 5, 2004 from: http://www.familiesusa.org/site/ PageServer?pagename= new2001data
- Paul, R. W., & Elder, L. (2002). Critical thinking: Tools for taking charge of your professional and personal life. Upper Saddle River, NJ: Financial Times/Prentice Hall.
- Peterson, (2004, February I). Making drugs, shaping the rules. New York Times, p. A1.
- Relman, A. S., & Angell, M. (2002, December 16). America's other drug problem: How the drug industry distorts medicine and politics. *The New Republic*, pp. 27-41.
- Research Triangle Institute. (2002). Screening for depression: Systematic evidence review. Rockville, MD: Agency for Health Care Quality and Research.

- Safer, D. J. (2002). Design and reporting modifications in industry-sponsored comparative psychopharmacology trials. *Journal of Nervous and Mental Disease, 190*, 583-592.
- Schulman, K. A., Seils, D. M., Timbie, J. W., Sugarman, J., Dame, L. A., Weinfurt, K. P., Mark, D. B., & Califf, R. M. (2002). A national survey of provisions in clinical-trial agreements between medical schools and industry sponsors. *New England Journal of Medicine*, 347, 1335-1341.
- Sharav, V. H. (2004). Conflicts of interests policy-New York Times. *Alliance for Human Research Protection*. Available at: http://www.ahrp.org/infomail/04/03/28.html
- Sharav, V. H. (2003). Children in clinical research: A conflict of moral values. American Journal of Bioethics, InFocus, pp. 1-81. Retrieved May 7, 2003 from http://bioethics.net
- Shogren, E. (2004). FDA sat on report linking suicide, drugs. Los Angeles Times. Retrieved April 6, 2004 from http://www.latimes.com/news/nationworld/nation/la-nasuicide6apr06,1,2908070.story?coll=la-headlines-nation
- Simes, R. J. (1986). Publication bias: The case for an international registry of clinical trials. *Journal of Clinical Oncology, 4*, 1529-1541.
- Sullivan, R. J., & Hagen, E. H. (2002). Psychotropic substance-seeking: Evolutionary pathology or adaptation? *Addiction*, 97, 389-400.
- Szasz, T. (1974). Ceremonial chemistry: The ritual persecution of drugs, addicts, and pushers. New York: Anchor Press/Doubleday.
- Torrey, E. F. (1992). Freudian fraud: The malignant impact of Freud's theory on American thought and culture. New York: HarperCollins.
- Vastag, B. (2001). Pay attention: Ritalin acts much like cocaine. JAMA, 286, 905-906.
- Waters, R. (2004, April 16). FDA was urged to limit kids' antidepressants. Advice citing risk of suicide rejected. San Francisco Chronicle, p. A-1.
- Whitaker, R. (2002). Mad in America. Cambridge, MA: Perseus.
- WHO Mental Health Survey Consortium. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization world mental health surveys. [AMA, 291, 2581-2590.
- Wilman, D. (2004, April 9). Curbs on outside deals at NIH urged. Los Angeles Times. Retrieved April 15, 2004 from http://latimes.com/la-na-nihapr09,1,1273370.story

ACKNOWLEDGEMENTS

Portions of this address were adapted from Cohen (2001, 2003, in press). The author wishes to thank students in his *Psychopharmacology and Social Work Practice* seminars for stimulating discussions on the issues raised in this presentation.

NOTE

I. One consequence of this trend in the USA: in some state rules for publicly financed federal block (Medicaid) grants, funds for social workers can only be used if children first receive drugs.