# Perspective

# Toward a Hippocratic Psychopharmacology

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Objective: To provide a conceptual basis for psychopharmacology.

**Method:** This review compares contemporary psychopharmacology practice with the Hippocratic tradition of medicine by examining the original Hippocratic corpus and modern interpretations (by William Osler and Oliver Wendell Holmes).

Results: The Hippocratic philosophy is that only some, not all, diseases should be treated and, even then, treatments should enhance the natural healing process, not serve as artificial cures. Hippocratic ethics follow from this philosophy of disease and treatment. Two rules for Hippocratic medicine are derived from the teachings of Osler (treat diseases, not symptoms) and Holmes (medications are guilty until proven innocent). The concept of a diagnostic hierarchy is also stated explicitly: Not all diseases are created equal. This idea helps to avoid mistaking symptoms for diseases and to avoid excessive diagnosis of comorbidities. Current psychopharmacology is aggressive and non-Hippocratic: symptom-based, rather than disease oriented; underemphasizing drug risks; and prone to turning symptoms into diagnoses. These views are applied to bipolar disorder.

**Conclusions:** Contemporary psychopharmacology is non-Hippocratic. A proposal for moving in the direction of a Hippocratic psychopharmacology is provided.

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#### Clinical Implications

Three clinical implications are: treat diseases, not symptoms; medications are guilty until
proven innocent (the presumption is against their use unless there is strong reason to use
them) and diagnoses are not created equal (use the concept of a diagnostic hierarchy to avoid
making symptoms into diagnoses, and to avoid excessively diagnosing comorbidities).

### Limitations

- This paper was a conceptual review, not a data-based systematic review of evidence; some relevant evidence was likely omitted.
- The assessment of Hippocratic concepts is based on a limited interpretive review; other interpretations are possible.
- Discussions of current psychopharmacology practice might be more specific to North America than other regions or countries.

**Key Words:** psychopharmacology, Hippocratic, ethics, bipolar disorder, diagnostic hierarchy, William Osler, Oliver Wendell Holmes, philosophy

Psychiatrists prescribe drugs frequently. Do we have reason for concern? My view is that contemporary psychiatric practice far exceeds its scientific evidence base, with overuse of psychotropic medications, contrary to the Hippocratic tradition. I do not argue that psychotropic medications should be avoided or simply prescribed less frequently, but rather they should be used within a consciously Hippocratic philosophy. The best rationale for psychopharmacology—when to prescribe, when not to prescribe, and what to prescribe—is to be found in a rediscovery of the Hippocratic approach to diagnosis and treatment.

### Context

In the United States, psychiatrists prescribe medications to 82% of their patients. From 1987 to 1997, the use of ADs for depression doubled from 37% to 74%. Psychotherapy for such patients decreased slightly from 71% to 60%. Between 1987 and 1999, the use of ADs for anxiety disorders also increased from 18% to 44%. Anxiolytic medications are also commonly prescribed, yet in 47% of cases, independent researchers could not identify diagnosis-based indications for such anxiolytics. In general, psychotherapy treatment has not decreased in frequency (3.2/100 individuals in 1987, compared with 3.6/100 in 1997). However, psychotherapy alone is much less frequent (concomitant AD use increased from 14% in persons receiving psychotherapy in 1987 to 49% in 1997).

This practice pattern is a major reversal, compared with 3 decades ago, when most psychiatrists primarily practiced psychotherapy. No doubt a psychopharmacology revolution has occurred, abetted by advances in neurosciences and a shift in psychiatry after DSM-III (1980) toward greater emphasis on making diagnoses (as in the classic medical tradition). Further, clinical psychopharmacology research in psychiatry, has provided more empirical evidence for treatments. 8

Decades ago, <sup>9</sup> psychotherapies were seen as central and often curative; psychopharmacology is presently seen as central to key psychiatric conditions like mood disorders, <sup>10</sup> with psychotherapies as adjunctive, <sup>11</sup> or the combination is viewed as more effective than either alone. <sup>12</sup>

In theory, it is often stated that medications plus psychotherapies provide optimal treatment, with the biopsychosocial model commonly invoked.<sup>13</sup> In practice, psychotherapies are seen as expensive or inaccessible to some patients (particularly specific varieties other than psychoanalytically-derived versions).<sup>14</sup> Sometimes patients opt out of psychotherapy based on their own preferences, as often insurance companies preferentially reimburse cheaper options (medications, or psychotherapies provided by nonpsychiatrists).<sup>15,16</sup>

Given these scientific and nonscientific factors, psychiatric medications are almost invariably used, while psychotherapies are intermittently provided. <sup>16</sup>

Lastly, there are the sobering results of the National Comorbidity Survey: only one-half of individuals currently treated by clinicians (mostly with psychotropic medications) have a current diagnosable mental disorder. <sup>17</sup> In other words, psychiatrists often practice symptom- rather than diagnosis-oriented treatment.

### **Hippocratic Medicine**

The practice of psychiatry today thus involves aggressive treatment of symptoms with medications. Is this approach in the best scientific, ethical, and historical tradition of the medical profession? Often, the Hippocratic tradition is seen as setting that standard.

There is a general misunderstanding of the term "Hippocratic," usually associated with the ethical maxims of the Hippocratic oath such as "first do no harm," later Latinized as *primum non nocere*. The full original quote was in the maxim of Epidemics I: "As to diseases, make a habit of two things—to help, or at least to do no harm." The Hippocratic tradition in medicine is identified simply with a conservative approach to treatment. While partly true, this popular simplification fails to capture the deeper genius of Hippocratic thinking, for its ethical maxims were not abstract opinions but rather grew out of its theory of disease.

The basic Hippocratic belief is that nature is the source of healing, and the job of the physician is to aid nature in the healing process. A non-Hippocratic view is that nature is the source of disease, and that the physician (and surgeon) needs to fight nature to effect a cure. <sup>18</sup> Even in ancient Greece, physicians had many potions and pills to cure ailments. Hippocrates resisted interventionistic medicine, and his treatment recommendations often involved diet, exercise, and wine, all designed to strengthen natural forces in recovery. If nature will cure, then the job of the physician is to hasten nature's work carefully, and at all costs to avoid adding to the burden of illness. <sup>18,19</sup>

Based on this philosophy of disease, the Hippocratics divided diseases into 3 types: curable, incurable, and self-limiting. Curable diseases required intervention aimed at aiding the

### Abbreviations used in this article

AD antidepressant

ADHD attention deficit hyperactivity disorder

BD bipolar disorder

BPD borderline personality disorder

ECT electroconvulsive therapy

natural healing process. Incurable diseases generally were best left untreated, because treatments did not improve illness and, owing to side effects, would only add to suffering. Self-limiting diseases also did not require treatment, because they improved spontaneously, and by the time any benefits of treatment would occur, the illness would resolve by itself, again leaving only an unnecessary side effect burden. The concept of *primum non nocere* meant knowing when to treat and when not to treat, based on the kind of disease diagnosed.

## Hippocratic and non-Hippocratic (Galenic) Approaches to Psychopharmacology

Applied to psychopharmacology, a Hippocratic approach would avoid medications as much as possible except where they can clearly help the natural process of healing, and with great attention to side effects. A Hippocratic psychopharmacologist would be highly aware of the natural history of mental illnesses, knowing that many conditions resolve spontaneously at some point, and always intervening less with medications in such cases. The Hippocratic psychopharmacologist would often refrain from prescribing any medications at all, instead emphasizing psychosocial interventions, such as psychotherapies or lifestyle changes (moving, changing jobs, exercise), to spur on the natural healing process.

Non-Hippocratic approaches are best exemplified by the Galenic tradition, in which a theory, based on the 4 humours, is the source of diagnosis and treatment, clinical observation is demeaned, nature is viewed as the enemy, and the doctor as the source of the cure. Treatments are given freely, with the belief that illnesses will not abate otherwise.

### The Hippocrates Wars

The history of medicine (and psychiatry) can be viewed as a constant conflict between these Hippocratic and Galenic traditions. Of course, this dichotomy about nature and disease is somewhat artificial. Nature appears to be both cause of disease and source of healing. Indeed, with some diseases, a surgeon cures disease, quite non-Hippocratically, by cutting it out. Nevertheless, even in surgery, the Hippocratic tradition is central. For instance, current wound healing methods (keeping the wound clean, as opposed to active surgical debridement) is the result of a long battle between Hippocratic ("God heals, and the surgeon dresses the wounds")<sup>21</sup> and non-Hippocratic views.<sup>22</sup>

One might expect even more divided opinion in psychiatry than in surgery. Indeed, in the history of psychiatry, the contrast between these 2 philosophies has been constant. One can view "moral therapy," introduced by Philippe Pinel, as a return to Hippocratic methods (Pinel overtly viewed his approach as Hippocratic).<sup>23</sup> In contrast, his contemporary,

Benjamin Rush, the father of American psychiatry, directly and savagely attacked Hippocratic thinking for its therapeutic conservatism: "It is impossible to calculate the mischief which Hippocrates has done, by first marking Nature with his name, and afterwards letting her loose on sick people. Millions have perished by her hands."<sup>24</sup> Rush strongly advocated extensive bleeding (leeching) and purging for mental illnesses. <sup>25–27</sup> Some 20th-century approaches to biological psychiatry, such as psychosurgery and colectomy cure of schizophrenia, are also non-Hippocratic theories. <sup>26,28</sup> This history cannot be ignored. To move toward a new Hippocratic psychopharmacology for the 21st century, perhaps we should first learn from the great Hippocratic teachers of the 19th century.

### William Osler: Disease, Not Symptoms

Like Hippocrates, William Osler is often cited but not widely read. He is most known for his emphasis on patients as individuals, as the father of medical humanism, and the ideal well-bred physician. Nevertheless, in his prime, Osler was a cutting-edge, scientifically-oriented physician<sup>29,30</sup> who emphasized the importance of pathology, and based clinical skills on pathological confirmation and laboratory testing.<sup>29–31</sup> He probably conducted more than 1000 autopsies. He also advocated the Hippocratic tradition, stressing clinical observation and diagnosis, and opposing aggressive medication treatment.<sup>29,30</sup> His therapeutic conservatism (some called it nihilism)<sup>32</sup> was not simply a personal attitude; Osler saw this as the upshot of scientific medicine.

In Osler's age, physicians had recently replaced bleeding and purging with pills and potions. Taking the Hippocratic view, Osler disapproved of those extensive treatments because they disregarded disease.<sup>29</sup> Osler thought 19th-century medicine was not scientific because it was symptom- rather than disease-oriented.<sup>20</sup> We need to study diseases that produce symptoms and then treatments would be clear<sup>29</sup>:

A man cannot become a competent surgeon without a full knowledge of human anatomy, and the physician without physiology and chemistry flounders along in an aimless fashion, never able to gain any accurate conception of disease, practicing a sort of popgun pharmacy, hitting now the malady and again the patient, he himself not knowing which.<sup>19</sup>

Osler felt that scientific medicine was the treatment of diseases, not symptoms. Physicians need to shift their focus from identifying and treating symptoms to understanding the diseases that cause those symptoms, Osler thought. Once those diseases were understood, appropriate treatments would arise. Instead of antijaundice treatments for yellow skin, antipyretic treatments for fever, pro-energy treatments for fatigue, and antichill treatments for coldness, the syndrome causing those

# Table 1 Two rules for Hippocratic psychopharmacology<sup>a</sup>

Osler's rule: Treat diseases, not symptoms.

Holmes' rule: Medications are guilty until proven innocent.

<sup>a</sup>Adapted from Ghaemi et al<sup>20</sup> and Ghaemi<sup>57</sup>

symptoms needed to be studied, and if identified as a disease (such as hepatitis), treating the single disease would cure the many symptoms.

In short, the solution was diagnosis before drugs.

In the fight we have to wage incessantly against ignorance and quackery among the masses, and follies of all sorts among the classes, diagnosis, not drugging, is our chief weapon of offence. Lack of systematic personal training in the methods of the recognition of disease leads to the misapplication of remedies, to long courses of treatment when treatment is useless, and so directly to that lack of confidence in our methods which is apt to place us in the eyes of the public on a level with empirics and quacks.<sup>34</sup>

This was the line of demarcation between scientific and nonscientific medicine. Nonscientific physicians asked only to know symptoms, followed by treatments. Scientific physicians sought to know if symptoms led to disease, and only then they might treat the disease:

The 19th century has witnessed a revolution in the treatment of disease, and the growth of a new school of medicine. The old schools, regular and homeopathic, put their trust in drugs, to give which was the alpha and omega of their practice. For every symptom there were a score or more medicines, vile, nauseous compounds in one case; bland, harmless dilutions in the other. The characteristic of the new school is firm faith in a few good, well-tried drugs, little or none in the great mass of medicines still in general use.<sup>34</sup>

Osler's reference to "a few good, well-tried drugs" is especially relevant to psychiatry. We have basically 4 major categories of drugs: ADs, anxiolytics, mood stabilizers, and antipsychotics. With a few exceptions, agents within each class are of equal efficacy overall. Our most potent biological interventions have been with us for many years: ECT (1938), lithium (1949), monoamine oxidase inhibitors (1957), benzodiazepines (1960), and clozapine (1963). Since then, no more efficacious drugs have been discovered in any of the 4 classes. (While an exaggeration, the Canadian innovator in psychopharmacology Heinz Lehmann once said that with

dextroamphetamine and chlorpromazine he could treat all psychiatric conditions.)<sup>35</sup>

Osler also foresaw future politics. If we reject disease-oriented medicine, we are left at the mercy of social forces tending toward overmedication: patients themselves ("Man has an inborn craving for medicine")<sup>34</sup>; the pharmaceutical industry (about whom his warnings are all too familiar: "To modern pharmacy we owe much, and to pharmaceutical methods we shall owe much more in the future, but the profession has no more insidious foe than the large borderland pharmaceutical houses."<sup>34</sup>); and doctors' own greed (giving pills keeps customers happy).

Thus, Osler teaches us the first rule for a Hippocratic psychopharmacology—Osler's Rule: Treat diseases, not symptoms (see Table 1).

### Oliver Wendell Holmes: Putting Medications on Trial

Another key figure who fought non-Hippocratic medicine was Oliver Wendell Holmes.<sup>20,24</sup> In an 1861 lecture to the Massachusetts Medical Society, he described the role of medications in Hippocratic medicine as:

Presumptions are of vast importance in medicine, as in law. A man is presumed innocent until he is proven guilty. A medicine . . . should always be presumed to be hurtful. It always is *directly* hurtful; it might sometimes be *indirectly* beneficial. If this presumption were established . . . we should not so frequently hear the remark . . . that, on the whole, more harm than good is done by medication. <sup>24</sup>

He then proceeded to draw the conclusions that would follow:

Throw out opium, which the creator himself seems to prescribe, for we often see the scarlet poppy growing in the cornfields, as if it were foreseen that wherever there is hunger to be fed there must also be pain to be soothed; throw out a few specifics [vitamins and minerals] which our art did not discover, and is hardly need to apply; throw out wine, which is a food, and the vapours which produce the miracle of anesthesia, and I firmly believe that if the whole materia medica [equivalent to our current Physician's Desk Reference], as now used, could be sunk to the bottom of the sea, it would be all the better for mankind,—and all the worse for the fishes.<sup>24</sup>

This eloquent plea for a return to Hippocratic principles in medicine made the front page of the *New York Times*; however, it has failed to take root in modern medicine.

# Table 2. The diagnostic hierarchy of psychiatric disorders

- Mood disorders
- II. Psychotic disorders
- III. Anxiety disorders
- IV. Personality disorders
- Other disorders (for example, ADHD, eating disorders, conversion disorders, dissociative disorders, sexual disorders)

Diagnoses should be made top down; thus, in general, disorders lower on the hierarchy should not be made in the active presence of disorders higher in the hierarchy.

### **Risks and Benefits**

Holmes can be seen as simply presaging evidence-based medicine. He requires proof of efficacy before we prescribe medications. In fact, Holmes' lecture was cited a century later to support the 1963 Food and Drug Administration law requiring proof of efficacy to market medications in the US.<sup>36</sup>

Yet Holmes went further. He provided a philosophy of pharmacology. He argued that the baseline, default position of clinicians should be not to use medications (until proven effective), rather than having a default position to use medications (until proven harmful). This is a legalistic argument (appropriate for the father of a famed Supreme Court justice): In the law, a person is innocent until proven guilty; in medicine, according to Holmes, drugs should be guilty until proven innocent. There should be a presumption they are harmful; they need not be proven harmful; they do need to be proven safe and effective.

In Holmes' theory, when physicians assess risks and benefits of a treatment, they need to start on the benefit side of the ledger. As we presume all drugs to be harmful, none should be used until there is some proof of benefit. The more valid the scientific proof, the better.<sup>20</sup> The universe of options should be limited to proven treatments, not to all available (but often poorly proven) treatments. Instead, patients and physicians frequently begin on the safety side, asking: What are the safest available drugs? On this approach, placebo would be the safest treatment to use, or placebo-like drugs, quite benign in side effects but often rather ineffective (especially in off-label usage). An example is the extensive use of gabapentin for mood disorders in the late-1990s,<sup>37</sup> despite its lack of proven efficacy at that time, followed by evidence of its inefficacy in acute mania.<sup>38</sup> In fact, we might call the condition that Holmes diagnosed "gabapentin syndrome."

Holmes' Rule, a second guide toward a Hippocratic psychopharmacology, would then be: All medications are guilty until proven innocent (see Table 1).

### **Should We Never Treat Symptoms?**

Today, many psychiatrists practice nonscientific symptomoriented treatment, giving sedatives for insomnia, stimulants for fatigue or distractibility, anxiolytics for tension, ADs for depressive symptoms, and mood stabilizers for lability, leading to an excessive and ineffective polypharmacy.<sup>20</sup>

Critics might argue for a practical need for dimensional and even symptom-oriented approaches given a lack of certainty regarding the discreteness of putative diseases<sup>39</sup> and lack of treatments for syndromes with multiple symptom constellations and comorbidities (such as BPD). 40 My own view is that such complex conditions are not discrete, valid disease entities, but either conglomerations of multiple diseases or not diseases at all (but rather "problems of living"). 41 As for the practical need to treat symptoms, all physicians do so, and certainly it is humane to relieve suffering where this can be done safely and briefly, as with analgesics for pain. Nevertheless, the Hippocratic approach emphasizes that this approach to pharmacology should be the exception, not the rule. Such treatment should be brief in general; symptomatic treatment reflects our ignorance about disease; and symptomatic medicine, if necessary, is a stop-gap measure until we better understand diseases.

### A Hippocratic Nosology: The Diagnostic Hierarchy

This is less controversial if we understand the concept implicit in contemporary nosology of a diagnostic hierarchy. Derived from the European tradition in psychiatry, the hierarchical approach argues that certain diagnoses lower on the hierarchy should not be made if other diagnoses higher on the hierarchy are present: All diagnoses are not created equal. 42 In this perspective, mood disorders sit at the top of the diagnostic hierarchy (see Table 2). This diagnostic hierarchy concept is implicit in DSM-IV, where psychotic symptoms should not lead to diagnosing psychotic disorders (like schizophrenia) unless mood disorders are first ruled out. Panic disorder should not be diagnosed if panic symptoms occur only during mood episodes. The same principle can be extended to other conditions (although here DSM-IV is not explicit): BPD should not be diagnosed unless mood disorders are absent or, alternatively, unless patients are currently euthymic (not in an active mood episode); this approach would allow us to distinguish between the 2 conditions. 43 The same method holds with ADHD, especially in adults: the diagnostic hierarchy concept would discourage ADHD diagnosis in the presence of active mood disorder.44

In general, the concept of a diagnostic hierarchy can undergird a Hippocratic approach to psychopharmacology. Because mood disorders can produce not only mood symptoms but almost any psychiatric symptom, treatment of mood disorders can improve all associated nonmood symptoms. Similarly, when BPD occurs, the common approach of extensive symptom-oriented treatment<sup>45</sup> (antipsychotics as "ego glue"<sup>46</sup> or for self-cutting, ADs for depressive symptoms, benzo-diazepines for anxiety symptoms, anticonvulsants for mood swings) would be discouraged,<sup>47</sup> with emphasis placed on psychotherapeutic (such as dialectical behavioural therapy or other empirically studied alternatives)<sup>48</sup> treatment for the overall condition.

It might be argued that this concept of a diagnostic hierarchy, though intuitively and clinically reasonable, is not based on science, but rather a reflection of our ineluctable attraction to taxonomy (an application of Occam's razor, as opposed to Hickam's dictum: patients can have as many diagnoses as they please). Nevertheless, I would suggest that the concept of a diagnostic hierarchy is based on science and is as scientific as the law of gravity, for it is an organizing principle based on empirical data. For instance, numerous empirical studies have now shown that auditory hallucinations are not diagnostic of schizophrenia, but rather occur frequently in BD<sup>49</sup>; thus there is a hierarchy, based on scientific empirical data, that places BD above schizophrenia in the diagnostic assessment of psychosis. Similar data exist for anxiety symptoms<sup>50</sup> or ADHD-like cognitive symptoms<sup>51</sup> being common in mood disorders. The concept of a diagnostic hierarchy is not itself a datum but it is based on data, and not merely speculative. Ignoring the diagnostic hierarchy, psychiatry will remain mired in a mania for comorbidities leading to excessive polypharmacy.<sup>52</sup>

### Clinical Example: Bipolar Disorder

Much as syphilis was dubbed by Osler as the prototypic medical illness (because one could encounter almost any kind of medical symptom in its course), BD can also be seen as the prototypical psychiatric disease. In its course, one can observe mood episodes, anxiety conditions, cognitive problems, sleep impairment, energy alterations, and even frank psychosis. A non-Hippocratic, symptom-oriented treatment can quickly lead to the use of all classes of psychotropic agents. Nevertheless, the Hippocratic approach would emphasize that the overall disease is one of recurrent mood episodes, and the overall treatment is the prevention of such recurrence, that is, the use of mood stabilizers. 53 With such agents, all other symptoms can be controlled, including anxiety, insomnia, attention problems, mood swings, and delusions, without the need for any specific symptomatic treatment for those conditions. Sometimes symptomatic treatment might be necessary, but it is not the case that symptomatic treatment is always necessary. In many people, mood stabilizers can take care of all of the symptoms that emerge from the basic BD entity. Indeed, the non-Hippocratic nature of symptom-oriented treatment becomes especially apparent when examining the potential for harm caused by nonmood stabilizers in BD (such as parkinsonism or metabolic syndrome with antipsychotics. 54 and mania or long-term rapid cycling with ADs<sup>55</sup>).

The Hippocratic approach would de-emphasize the treatment of acute mood episodes, whether of depression or mania, because these are self-limiting conditions. They always go away, but they always come back. Thus the treatment that is absolutely necessary is the long-term prophylaxis of recurrence of episodes, that is, the use of mood stabilizers. The treatment of acute episodes would be optional from the Hippocratic perspective, and if needed, should be conducted briefly. Instead, we see the constant breaking of Osler and Holmes' rules. For example, clinicians constantly treat acute depressive symptoms with ADs, despite evidence of inefficacy, and then they continue ADs long term.

Some might reply that, while desirable and ideal, less AD and antipsychotic use seems contrary to clinical practice as reflected by practice surveys. Nevertheless, it could be that we see less mood stabilizer monotherapy efficacy because we try less mood stabilizer monotherapy. Many patients have received ADs and antipsychotics from the very onset of their illness, but never even receive a lithium trial alone.

It might also be argued that the waiting out of time-limited events like mania and depression in BD challenges the patience both of patients and of physicians, despite the risks of adjunctive treatment. Yet medicine without patience is non-Hippocratic and leads to more harm than good. This is the whole rationale for knowing and attending to the natural history of the illness in the course of making treatment decisions. I am not saying one should never treat acute depressive or manic episodes. I am saying one does not need to always (or even usually) treat them, as we are doing now, with acute agents (ADs or antipsychotics).

### **Hippocratic Ethics**

Being Hippocratic does not mean that one is ethical, and being non-Hippocratic is not equivalent to being unethical.<sup>56</sup> Ethics is not an entity that one possesses or not. Rather, Hippocratic ethics grow out of its philosophy of disease and treatment, which any physician is free to either accept or reject. It is not unethical to be non-Hippocratic; it just involves a different perspective on disease and treatment. The question is not whether the Hippocratic ethic is right or wrong but rather whether the Hippocratic philosophy of disease and treatment is correct or not.

Thus without implying any moral disapproval, to claim that many psychiatrists today practice non-Hippocratically is to say that they believe that nature is the enemy and that they need to intervene aggressively to cure patients. The purpose of this paper is to point out these assumptions and to note that they conflict with the Hippocratic tradition that so many of us profess.

### **Conclusions**

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Contemporary psychiatric practice consists of a prosaic psychopharmacology. The rationale for how medications are prescribed, when, and for what reason, is not clear. I suggest that US psychopharmacology today is symptom-oriented, treatment-oriented, and interventionistic. In a word, it is non-Hippocratic. The Hippocratic approach emphasizes the need to withhold, or at least minimize, treatment for incurable or self-limiting diseases. This tradition is most compatible with scientific medicine, especially as interpreted by William Osler (who emphasized the need to treat diseases, not symptoms) and Oliver Wendell Holmes (who argued for a presumption against the use of medications). Perhaps a rediscovery of Hippocratic method can permit modern psychopharmacology to get us closer to that ever-elusive, ancient goal of the school of Cos: to cure sometimes, to heal often, and to console always.

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#### References

- Tanielian TL, Marcus SC, Suarez AP, et al. Datapoints: trends in psychiatric practice, 1988–1998: II. Caseload and treatment characteristics. Psychiatr Serv. 2001;52:880.
- Olfson M, Marcus SC, Druss B, et al. National trends in the outpatient treatment of depression. JAMA. 2002;287:203-209.
- Olfson M, Marcus SC, Wan GJ, et al. National trends in the outpatient treatment of anxiety disorders. J Clin Psychiatry. 2004;65:1166-1173.
   Olfson M, Pincus HA. Use of benzodiazepines in the community. Arch Intern
- Med. 1994;154:1235–1240.

  5. Olfson M. Marcus SC. Druss B. et al. National trends in the use of outpatient
- Olfson M, Marcus SC, Druss B, et al. National trends in the use of outpatient psychotherapy. Am J Psychiatry. 2002;159:1914-1920.
- Klerman GL, Vaillant GE, Spitzer RL, et al. A debate on DSM-III. Am J Psychiatry. 1984;141:539–553.
- Healy D. The antidepressant era. Cambridge (MA): Harvard University Press; 1998.
- 8. Gray G. Evidence-based medicine: an introduction for psychiatrists. J Psychiatr Pract. 2002;8:5–13.
- Semrad E, Klerman G. Discussion. In: Solomon P, editor. Psychiatric drugs: proceedings of a research conference held in Boston. New York (NY): Grune and Stratton; 1966:112-118.
- Frank E, Kupfer DJ, Perel JM, et al. Three-year outcomes for maintenance therapies in recurrent depression. Arch Gen Psychiatry. 1990;47:1093–1099.
- Miklowitz DJ, Otto MW, Frank E, et al. Psychosocial treatments for bipolar depression: a 1-year randomized trial from the Systematic Treatment Enhancement Program. Arch Gen Psychiatry. 2007;64:419

  –426.

- Keller MB, McCullough JP, Klein DN, et al. A comparison of nefazodone, the cognitive behavioral-analysis system of psychotherapy, and their combination for the treatment of chronic depression. N Engl J Med. 2000;342:1462–1470.
- Gabbard GO, Kay J. The fate of integrated treatment: whatever happened to the biopsychosocial psychiatrist? Am J Psychiatry. 2001;158:1956–1963.
- 14. Clemens NA, MacKenzie KR, Griffith, JL et al. Psychotherapy by psychiatrists in a managed care environment: must it be an oxymoron? A forum from the APA commission on Psychotherapy by Psychiatrists. American Psychiatric Association. J Psychother Pract Res. 2001;10:53–62.
- Sturm R, Klap R. Use of psychiatrists, psychologists, and master's-level therapists in managed behavioral health care carve-out plans. Psychiatr Serv. 1999:50:504-508.
- Stone AA. Psychotherapy in the managed care health market. J Psychiatr Pract. 2001;7:238-243.
- Kessler RC, Demler O, Frank RG, et al. Prevalence and treatment of mental disorders, 1990 to 2003. N Engl J Med. 2005;352:2515–2523.
- 18. Jouanna J. Hippocrates. Baltimore (MD): Johns Hopkins University Press; 1999.
- Osler W, editor. Aequanimitas. 3rd ed. Philadelphia (PA): The Blakiston Company; 1932.
- Ghaemi SN. Polypharmacy in psychiatry. New York (NY): Marcel Dekker; 2002.
- Coppi C. I dressed your wounds, God healed you—a wounded person's psychology according to Ambroise Pare. Ostomy Wound Manage. 2005;51:62-64.
- 22. Shorter E. Bedside manners. New York (NY): Simon and Schuster; 1985.
- Goldstein S. Console and classify: the French psychiatric profession in the 19th century. Chicago (IL): University of Chicago Press; 2002.
- Holmes OW. Currents and counter-currents in medical science. Medical essays 1842–1882. Boston (MA): Houghton-Mifflin; 1891.
- Eisenberg L. Furor therapeuticus: Benjamin Rush and the Philadelphia yellow fever epidemic of 1793. Am J Psychiatry. 2007;164:552–555.
- Shorter E. A History of Psychiatry. New York (NY): John Wiley and Sons; 1997.
- 27. Meyer A. Reevaluation of Benjamin Rush. Am J Psychiatry. 1945;101:433-442.
- Valenstein E. Great and desperate cures: the rise and decline of psychosurgery and other radical treatments for mental illness. New York (NY): Basic Books; 1986.
- McHugh PR. William Osler and the new psychiatry. Ann Intern Med. 1987;107:914–918.
- Bliss M. William Osler: a life in medicine. New York (NY): Oxford University Press; 1999.
- Malkin HM. The influence of William Osler on the development of clinical laboratory medicine in North America. Ann Clin Lab Sci. 1977;7:281–297.
- Paton W. The evolution of therapeutics: Osler's therapeutic nihilism and the changing pharmacopoeia. The Osler oration, 1978. J R Coll Physicians Lond. 1979:13:74-83.
- Suter RE. Hippocratic thought: its relationship to and between Andrew Taylor Still and Sir William Osler. J Am Osteopath Assoc. 1988;88:1243–1246, 1249–1254.
- Camac C. Counsels and ideals: from the writings of Sir William Osler, 2nd ed. London (GB): Oxford University Press; 1921.
- 35. Cole J. Personal Communication; 2005.
- Leber P. Clinical trials and the regulation of drugs. In: Gelder M, Lopes-Ibor J, Andersen D, editors. Oxford Textbook of Psychiatry. Oxford (GB): Oxford University Press; 2000:1247–1252.
- Petersen M. Court papers suggest scale of drug's use: lawsuit says doctors were paid endorsers [Print]. NY Times. 2003:C1, C2.
- Pande AC, Crockatt JG, Janney CA, et al. Gabapentin in bipolar disorder: a placebo-controlled trial of adjunctive therapy. Gabapentin Bipolar Disorder Study Group. Bipolar Disord. 2000;2:249

  –255.
- Stahl SM. Essential psychopharmacology. Cambridge (GB): Cambridge University Press; 2005.
- Van Praag HM, Asnis GM, Kahn RS, et al. Nosological tunnel vision in biological psychiatry. A plea for a functional psychopathology. Ann N Y Acad Sci. 1990;600:501–510.
- 41. Ghaemi SN. The concepts of psychiatry. Baltimore (MD): Johns Hopkins University Press; 2007.
- Surtees PG, Kendell RE. The hierarchy model of psychiatric symptomatology: an investigation based on present state examination ratings. Br J Psychiatry. 1979;135:438–443.
- Paris J, Gunderson J, Weinberg I. The interface between borderline personality disorder and bipolar spectrum disorders. Compr Psychiatry. 2007;48:145–154.
- Tamam L, Tuglu C, Karatas G, et al. Adult attention-deficit hyperactivity disorder in patients with bipolar I disorder in remission: preliminary study. Psychiatry Clin Neurosci. 2006;60:480–485.
- Hirschfeld RM. Pharmacotherapy of borderline personality disorder. J Clin Psychiatry. 1997;58(Suppl 14):48–52; discussion 53.

- Snyder S. The interaction of psychopharmacology and psychoanalysis in the borderline patient. Psychiatr Q. 1980;52:240-250.
- Zanarini MC. Update on pharmacotherapy of borderline personality disorder. Curr Psychiatry Rep. 2004;6:66-70.
- Paris J. Borderline or bipolar? Distinguishing borderline personality disorder from bipolar spectrum disorders. Harv Rev Psychiatry. 2004;12:140–145.
- Pope HG Jr, Lipinski JF, Diagnosis in schizophrenia and manic-depressive illness. Arch Gen Psychiatry. 1978;35:811-828.
- 50. Simon NM, Otto MW, Wisniewski SR, et al. Anxiety disorder comorbidity in bipolar disorder patients: data from the first 500 participants in the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD). Am J Psychiatry. 2004;161:2222-2229.
- Wozniak J, Biederman J, Kiely K, et al. Mania-like symptoms suggestive of childhood-onset bipolar disorder in clinically referred children. J Am Acad Child Adolesc Psychiatry. 1995;34:867–876.
- van Praag HM. Comorbidity (psycho) analyzed. Br J Psychiatry Suppl. 1996;129–134.
- Goodwin F, Jamison K. Manic depressive illness. 2nd ed. New York (NY): Oxford University Press; 2007.

- Shirzadi AA, Ghaemi SN. Side effects of atypical antipsychotics: extrapyramidal symptoms and the metabolic syndrome. Harv Rev Psychiatry. 2006;14:152–164.
- Ghaemi SN, Hsu DJ, Soldani F, et al. Antidepressants in bipolar disorder: the case for caution. Bipolar Disord. 2003;5:421–433.
- Gillett G. Bioethics in the clinic: Hippocratic reflections. Baltimore (MD): Johns Hopkins University Press; 2004.
- Ghaemi SN. Mood disorders: a practical guide. 2nd ed. Philadelphia (PA): Lippincott, Williams, and Wilkins; 2007.

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### Résumé: Vers une psychopharmacologie hippocratique

Objectif: Fournir une base conceptuelle à la psychopharmacologie.

Méthode: Cet article compare la pratique contemporaine de la psychopharmacologie avec la tradition hippocratique de la médecine en examinant le Corpus hippocratique et les interprétations modernes (de William Osler et Oliver Wendell Holmes).

Résultats: La philosophic hippocratique recommande que seulement certaines, et non toutes les maladies soient traitées, et le cas échéant, les traitements devraient améliorer le processus de guérison naturelle, et non servir de remèdes artificiels. L'éthique hippocratique procède de cette philosophie de la maladie et du traitement. Deux règles de la médecine hippocratique proviennent des enseignements d'Osler (traiter les maladies, pas les symptômes) et d'Holmes (les médicaments sont coupables jusqu'à ce qu'ils soient reconnus innocents). Le concept d'une hiérarchie diagnostique est aussi énoncé explicitement: les maladies ne sont pas toutes crées égales. Cette idée aide à éviter de confondre les symptômes pour les maladies et à éviter les diagnostics excessifs de comorbidité. La psychopharmacologie actuelle est agressive et non hippocratique: fondée sur les symptômes plutôt qu'axée sur la maladie; minimisant les risques des médicaments; et encline à convertir les symptômes en diagnostics. Ces vues sont appliquées au trouble bipolaire.

**Conclusions:** La psychopharmacologie contemporaine est non hippocratique. Une proposition de virage vers une psychopharmacologie hippocratique est offerte.