



Moses Maimonides. Courtesy of the National Library of Medicine.

## Maimonides's primer for treating bipolar illness

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A recent article by Ellen Frank and her colleagues reports on the efficacy of Interpersonal and Social Rhythm Therapy (IPSRT), a therapy that attempts to limit the number and extent of clinical regressions of individuals with bipolar illness by regularizing their daily routines.<sup>1</sup> Derived largely from interpersonal psychotherapy,<sup>2</sup> IPSRT “focuses on the links between mood symptoms and quality of social relationships and social roles, the importance of maintaining regularity in daily routines, and the identification and management of potential precipitants of rhythm disruption.”<sup>1p998</sup> It also emphasizes attention to “grief for the lost healthy self,”<sup>1p998</sup> a mourning for the compromised healthy functioning caused by the illness. The therapy educates patients about the manifestations of bipolar illness, suggests behavioral interventions to alleviate specific symptoms (e.g., sleep hygiene to minimize insomnia), and provides help in addressing adverse events caused by the disease. It is administered both acutely

and as a maintenance treatment.

IPSRT is based on the “social zeitgeber hypotheses.” Zeitgebers are environmental cues (e.g., light) that help regulate the biological clock of an organism; zeitgeber events (e.g., the light-dark cycle of a twenty-four-hour day) keep circadian rhythms normalized. Cindy Ehlers, Ellen Frank and David Kupfer suggest that loss of social zeitgebers, such as one’s routine responsibilities and contacts, can distort biological rhythms and, in turn, promote affective instability in vulnerable individuals.<sup>3</sup> Studies of rhythm-disrupting life events support this theory,<sup>4,5</sup> suggesting that the zeitgeber hypothesis may represent a crucial link between psychosocial and biological events.

In conjunction with pharmacologic management, adjunctive treatments such as cognitive therapy and psychoeducational programs have long proven beneficial to patients suffering from bipolar illness (e.g., by increasing medication compliance, decreasing the incidence of clinical episodes and hospital admissions, and enhancing psychosocial functioning).<sup>6</sup> Frank and her colleagues suggest that their randomized study of IPSRT also qualifies it as a useful treatment for bipo-

lar disorder. Their findings demonstrate that patients in the acute phase of illness who received IPSRT “experienced longer survival time without a new affective episode and were more likely to remain well for the full 2 years of the preventive maintenance phase.”<sup>1p1001</sup> They assert in support of the zeitgeber hypothesis that the benefits were “mediated by the substantially increased regularity of social routines among subjects receiving IPSRT.”<sup>1p1001</sup> Moses Maimonides (AD 1138–1204) would likely have concurred.

### Maimonides’s two treatises on the regimen of health

The extraordinary scholar Moses Maimonides was regarded as the wisest physician in medieval Spain. His writings include ten medical treatises addressing such diverse topics as asthma, poisons and their antidotes, hemorrhoids, sexual relations, and the classification of hundreds of drugs and medicinal herbs.<sup>7,8</sup> The eighth and ninth works in this series are *Regimen of Health* (circa 1193–1198) and *Discourse on the Explanation of Fits\** (circa 1199). *Regimen of Health* was written at the behest of the eldest son of Saladin the Great, Sultan al-Malik al-Afdal, who sought Maimonides’s guidance for symptoms that included “feeble” digestion and constipation, as well as “the occasional occurrence of melancholy, evil thoughts, desire for solitude, and foreboding of death.”<sup>9p16</sup> *Discourse on the Explanation of Fits*, written in response to a later request by the sultan, is a compilation of highly detailed answers to specific questions posed by the chronically ailing sultan. The title is generally believed to refer to fits of melancholy because al-Afdal’s various complaints are consistent with the neurovegetative changes common to chronic depression.<sup>7,8</sup> Seemingly he had not adhered to the directives in *Regimen of Health*, which Sherwin Nuland attributes to the fact that he was too “wedded to habits that were physically, emotionally, and politically hazardous.”<sup>8p211</sup> Fred Rosner shares the opinion, describing the sultan as a “frivolous and pleasure-seeking man” who “persisted in his indulgences” of “wine and women and warlike adventures against his own relatives and in the Crusades.”<sup>7p127</sup>

### Regimen of Health

*Regimen of Health* is a general discourse on health. The first two chapters discuss standard methods of medical treatment that were set forth in the teachings of Hippocrates and Galen. **Chapter one** reviews practices generally “applicable to all men”<sup>9p16</sup> about such issues as diet (e.g., what and when to eat; the quality of foods), as well as what activities should or should not be associated with the taking of food (e.g., bathing, sexual intercourse,

exercise). **Chapter two** presents a regimen for the sick when “there is no physician, or when, if available, the physician’s knowledge is not to be trusted.”<sup>9p16</sup> It describes when “it is proper to relinquish the sick to Nature”<sup>9p21</sup> and when to apply “strong remedies”<sup>9p21</sup> (e.g., phlebotomy or purgatives), how medications are not to be used if the sick can be managed by “regulating nourishment alone,”<sup>9p22</sup> and why herbs, as opposed to “complex medicaments,”<sup>9p23</sup> are the drugs of first choice when medication is required.

**Chapter three** specifically addresses the sultan’s complaints and presents a curative regimen. It contains a great deal of discussion about improving digestion, including directions for a proper diet and indications for the use of medications. Significantly, Maimonides emphasizes the importance of emotional issues in health maintenance. Noting that “passions of the psyche produce changes in the body, that are great, evident and manifest to all,”<sup>9p25</sup> he advises they “be kept in balance,”<sup>9p25</sup> as

The physician should make every effort that all the sick, and all the healthy, should be most cheerful of soul at all times, and that they should be relieved of the passions of the psyche that cause anxiety. . . . It is the same for someone



\* Also known as the *Treatise on Accidents*, it is considered by many to be the fifth chapter of the *Regimen of Health*. The reason for the ambiguity about the title remains unclear.<sup>9</sup>

who is overcome by grief and obsessions, or by terror of whatever is unnatural to fear, or by the diminution of satisfaction in what is natural for him to enjoy. In all of these, the skillful physician should place nothing ahead of rectifying the state of the psyche by removing these passions.<sup>9p25</sup>

Suggested means for “restraining the passions” include “studying books on morals, [and] the disciplines of the Law” as well as “contemplation” to dispel distressing thoughts, such as the loss of wealth.<sup>9p26</sup> Maimonides tells us that “thought regarding what has come and passed is of no value at all, and that sorrow and gloom about things that have come and passed are the occupation of fools.”<sup>9p26</sup>

Chapter four of *Regimen of Health* presents “advice that is beneficial in general,”<sup>9p27</sup> and reviews recommendations of common matters associated with health such as diet, drinking wine, bathing, sexual relations, and the effects of climate. Additionally Maimonides emphasizes the importance of habit, which he views as “fundamental in the conservation of health and in the cure of ailments.”<sup>9p31</sup> He warns against rapidly changing habits:

whatever is customary should be maintained. Even if the accustomed thing is contrary to the principles of medicine, one should not leave it for what is determined by these principles except gradually and over a long time, so that one does not perceive the change. If one alters any of his habits all at once he will performe fall sick.<sup>9p31</sup>

### Discourse on the Explanation of Fits

*Discourse on the Explanation of Fits* consists of twenty-two paragraphs, the first eighteen of which review treatments contained in *Regimen of Health*, and additionally support some recommendations suggested by other physicians. For example, Maimonides agrees that “steeping twenty drams of oxtongue in one Syrian ounce of wine and ten drams of rose water”<sup>9p33</sup> is an excellent bedtime draught, noting that as “sleep deepens, anxiety departs, the digestion improves, and the superfluities are repelled.”<sup>9p33</sup> And he concurs that “the use of oxymel of quince an hour after the meal, is correct; it is a good regimen to improve the digestion.”<sup>9p33</sup>

But, strikingly, the twenty-first paragraph prescribes hourly activities for the sultan to be followed daily. The detailed instructions seem designed to relieve al-Afdal's symptoms by regularizing his daily routine:

I declare that one should always aim to awaken from sleep at sunrise or a little before that. Two or three ounces of syrup of hydromel should be taken at that time. He should wait thereafter for an hour and then go riding. He should ride leisurely, and then, without stopping, gradually quicken the pace until the members are warmed and the respiration

alters. Then he should dismount, and rest until none of the changes caused by exercise remain on the skin of the body or in the respiration. After that, he should partake of one of the dishes mentioned previously. He should take some of the astringent fruits as has already been said . . . Then he should recline for sleep, and the chanter should intone with the strings and raise his voice and continue his melodies for an hour . . . until he sleeps deeply. . . . Physicians and philosophers have already mentioned that sleep in this manner, when the melody of the strings induces sleep, endows the psyche with good nature and dilates it greatly, thereby improving its management of the body. Upon awakening, he may be engaged for the rest of his day in reading whatever he wishes, or be attended by someone whose company he chooses. The best is the attendance of someone whose company is desirable because of his virtues, or the delight in beholding him, or his lightheartedness. All these dilate the psyche and remove evil thoughts from it.<sup>9p38</sup>

Rosner points out that the sultan's behaviors, such as his excessive drinking, reflect the fits of melancholy of the treatise's title.<sup>7p127</sup> However, he also notes other indulgences, such as womanizing and heightened aggressiveness in military campaigns. Like Nuland,<sup>8p209</sup> I believe the spectrum of these behaviors suggest bipolar illness rather than major depression. (At a minimum al-Afdal suffered from recurrent depressions, often a prodromal pattern of bipolar disorder and sometimes representative of a clinical presentation in which hypomanic episodes go unrecognized.) Even granting that the position of sultan conveys a contextual basis for profligate behavior, *Discourse on the Explanation of Fits* provides some support for the bipolar hypothesis. At one point Maimonides discusses the use of different draughts for treating individuals with “hot temperaments” and “cold temperaments,” noting that “some who follow the same course as kings suffering from melancholia” can also have “a disorder that tends toward mania, that is rage.”<sup>9p36</sup> Cognizant of the dangers of diagnosing “from minimal evidence provided in text from long ago,”<sup>8p210</sup> Nuland nevertheless concludes that the substance and context of these two treatises by Maimonides support the belief that the sultan suffered from bipolar illness.<sup>8p209</sup> I am inclined to agree.

### Maimonides—still worth reading

*Regimen of Health* and *Discourse on the Explanation of Fits* offer a fascinating glimpse into the mind and character of Maimonides. His clinical acumen, breadth of medical knowledge, and meticulous attention to detail are evident—and still worthy of the reader's appreciation. The treatises also reflect his well-recognized understanding of the importance of the mind-body interaction. Whereas the tradition of Hippocratic and Galenic medicine contained an unsophisticated grasp of the concept, noting indistinct influences of bodily fluids on temperament, Maimonides clearly articulated it. For example,

relating how “passions of the psyche” can produce bodily changes “that are great, evident and manifest to all,” he presents an unmistakable appreciation of psychosomatic issues:

you can see a man of robust build, ringing voice, and glowing face, when there reaches him, unexpectedly, news that afflicts him greatly. You will observe, that all of a sudden his color dims, the brightness of his face departs, he loses stature, his voice becomes hoarse, and even if he strives to raise his voice he cannot, his strength diminishes and often he trembles from the magnitude of the weakness, his pulse diminishes, his eyes sink, his eyelids become too heavy to move, the surface of his body cools, and his appetite subsides. The cause of all these signs is the recall of the natural heart and the blood into the interior of the body.<sup>9p25</sup>

More relevant to this discussion is Maimonides’s similar understanding of somatopsychic issues, as reflected in his detailed prescription of a daily routine designed to promote the sultan’s health. Viewed in the context of the findings of Frank and her colleagues,<sup>1</sup> I believe that *Regimen of Health* and *Discourse on the Explanation of Fits* comprise an early articulation of the zeitgeber hypothesis, as well an appreciation of its relevance to the treatment of bipolar illness. There is a striking parallel between the process of IPSRT and Maimonides’s instructions to the sultan. It supports Nuland’s observation that Maimonides’s aim was “clearly to regulate the day so carefully that the patient is always occupied, distracted from the obsessive thoughts” that may aggravate his emotional state.<sup>8p209</sup> In fairness, Maimonides’s treatment is not concerned exclusively with *social* zeitgebers; his was a biopsychosocial approach to medical care.<sup>10</sup> Nevertheless, the coincidence of his advice to al-Malik al-Afdal and IPSRT underscores a long understood need for broadly-based care of individuals with bipolar illness, and the aphorism that *plus ça change, plus c’est la même chose*.

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