Review

Ibn Imran's 10th century *Treatise on Melancholy*

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A B S T R A C T

Some see current views of mental illness, such as depression, as merely contemporary social constructions, with madness seen as a modernist break from medieval and ancient concepts. In contrast to these assumptions, here we describe one of the earliest texts on melancholia and mania, by Ibn Imran, an Arab physician of the 10th century.

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1. Introduction

Some critics hold that current views on depression cannot be found in ancient or medieval sources (Berrios and Porter, 1999; Healy, 1998). It is generally viewed that no full treatise on the topic existed before Burton's classic 1621 treatise on melancholy (Burton, 2001). However, at least one work pre-dates Burton by 600 years—the *Treatise on Melancholy* by Ibn
Ibn Imran in the 10th century (Ibn Imran and Omrani, 2009). It may be the world’s oldest surviving manuscript dedicated entirely to melancholic illness, a concept that has survived to present times (Angst and Marneros, 2001; Porter, 1999).

Ibn Imran conceptualized melancholy within Galen’s system of four humors (Porter, 1999), a view that was not uncommon in his time. He also identified minor forms of the disorder, and recommended particular treatment options, including herbal medicines, for different presentations of melancholy. In this paper, we will review and discuss this monograph, both for its historical interest and for its relevance to better understanding the history of psychiatry.

1.1. The Treatise on Melancholy by Ishaq Ibn Imran

This monograph on melancholia was written by Ishaq Ibn Imran, an Iraqi physician in Kairouan, Tunisia, in approximately 900. It is the oldest known surviving manuscript dedicated entirely to the topic of melancholia, and including current-day manic-depressive illness or bipolar disorder. The story of this manuscript exemplifies the complex, non-linear process of transmission of medical knowledge spanning both time and space. Although Ibn Imran both learned from, and highly respected, Graeco-Roman masters of medicine including Hippocrates, Rufus, and Galen, he approached the Treatise with a critical view of his predecessors’ work. He placed a premium on clinical observation in spite of prevailing Galenic theories regarding the four humors and their integral role in guiding medical treatment. Also in line with the Graeco-Roman tradition, he also viewed a balance in diet and physical fitness as important components in the treatment of disease. Ibn Imran’s ideas and definitions of melancholy are surprisingly modern, especially given the absence of demonological or supernatural explanations, which dominated Europe from the Middle Ages until the mid-17th century (Porter, 1999).

Ibn Imran’s work remained influential for centuries after his death, in large part owing to the work of Constantine the African, a Christian Tunisian physician who translated the manuscript into Latin while living in Monte Cassino (Constantine, 1065), evidently as part of a then-common effort to gather an- uscript into Latin while living in Monte Cassino (Constantine, 1065), evidently as part of a then-common effort to gather an- uscript into Latin while living in Monte Cassino (Constantine, 1065), evidently as part of a then-common effort to gather an-

1.2. Ibn Imran and his predecessors

In order to fully understand Ibn Imran’s theories regarding melancholy, one should first examine the state of the field prior to his work. Though many philosophers and physicians contributed to the body of knowledge surrounding melancholy before Ibn Imran, three ancient scholars seem to have had the greatest impact on his work: Hippocrates, Rufus, and Galen. Hippocrates coined the founding aphorism originally defining melancholy, “If fear or sorrow lasts for a long time, it is a melancholic state,” but did not extensively pursue treatments or classifications of the disease. In the early second century, Rufus of Ephesus wrote a treatise on melancholy in Greek (Jackson, 2008) that was used as the primary scholarly reference on melancholy for over 500 years. Galen of Pergamon was perhaps the most influential ancient physician in structuring the classification of melancholy; with a few pages in his On the Affected Parts he imposed the classification of the disease for the next 1500 years, while building on Rufus’s work (Jackson, 2008).

Galen was one of the most prolific medical scholars of ancient times, yet in the mental health field, Arab physicians—including Ibn Imran—hailed Rufus above all others, likely because his book on melancholy was one of the first Greek medical treatises translated into Arabic (ca. 870). Ibn Imran goes as far as to say that Galen did not dedicate any special attention to melancholy, that he was content to “speak of it here and there in his writings” (Ibn Imran and Omrani, 2009) and that Rufus was his only predecessor to provide an exhaustive discourse on the subject. However, in the absence of Rufus’s original manuscript on melancholy, it is difficult to evaluate the impact of this work. Galen (and presumably Rufus) believed that melancholy was caused by the accumulation of black bile (hence, the term melancholia), which produced one of three types of illness depending on its location in the body. However, Ibn Imran attributed at least one form of melancholy to yellow bile. His willingness to ascribe melancholic symptoms to a cause other than black bile separates Ibn Imran from Galen even though his theoretical scheme generally followed Galen’s classification system.

Ibn Imran defined melancholy similarly to Hippocrates, albeit less succinctly:

Melancholy affects the soul through fear and sadness—the worst thing that can befall it. Sadness is defined by the loss of what one loves; fear is the expectation of misfortune.

Ibn Imran went further, differentiating between emotion and cognition to find what he considered a true definition of melancholy. He reported that most scholars considered melancholy to consist of “black thoughts and feelings of misfortune” that come to bear on one’s spirit for reasons one believes to be true but are not. However, he also considered that melancholy can be defined by “fears and doubts that seize one’s soul and engender panic and fright.” Ibn Imran thereby added distrust to the Hippocratic dyad of fear and sadness, and suspicion remained inseparable from the definition of melancholy until concepts of paranoia emerged in the 19th century (Berrios and Porter, 1999).

1.3. Causes of melancholy

According to Ibn Imran, melancholy could be hereditary, passed to the progeny through malfunctions of the sperm or uterus, or acquired independently from biological influences, mainly due to an imbalance of the six fundamental
elements. Causes of disease attributable to either biological or environmental influence are not a far cry from today’s view that unipolar depression and bipolar disorder are both genetically transmitted and influenced by environmental factors. However, closer inspection of Ibn Imran’s causes of melancholy indicates further that his philosophy was not wholly aligned with modern-day definitions. Notably, he believed that much of disease states can be attributed to correctable humoral imbalances. Though incorrect, his extensive explanations of the imbalances between certain humors and how these imbalances could lead to melancholy was perhaps the most important aspect of the Treatise at the time of its writing. His views led to the adoption of a quaternary system in which all humors, not only black bile, could contribute to melancholy. This system, after being revised and “perfected” by Avicenna a century later (Radden, 2002), prevailed until the 17th century.

In Ibn Imran’s view, environmental factors could also contribute to the imbalance between the four humors and thus to the development of melancholy. He discussed at length the ways in which consumption of certain foods and wines could lead to melancholy, and noted that the “prolonged abuse of wine” inflicts diseases beyond and more serious than melancholy (Ibn Imran and Omrani, 2009). He also believed that living in a climate that is too hot or too cold, too wet or too dry, would lead to the disease, which is consistent with the antiquated view that the Mediterranean climate was the only type conducive to civilization, and that climate extremes produced both heathenism and disease.

1.4. Relationship to mania

The notion of the transformation of melancholy into mania (and vice versa) in the same person at different times was introduced by Aretaeus and was subsequently acknowledged by his Greek, Roman, and Arab successors (Angst and Marneros, 2001). However, prior to the 19th century, mania did not have the same paradigmatic value that was established with the concept of bipolar disorder; the relationship between mania and melancholia was seen as a transformation rather than as a cycle. In keeping with his times, Ibn Imran did not afford mania any autonomous status in relation to depression, implying transformation but no obligation of a cyclic nature of the disease. He believed mania to be a facet or evolutionary modality of depression. Dubbing mania the “leonine madness,” he described those affected by it as showing “courage, audaciousness, and strength similar to those of lions.” He wrote “[mania] is difficult to cure, hard to treat” and noted that those affected by true mania rarely complain of being ill.

In Ibn Imran’s view, diagnostic clues should be given by the patient, and diagnosis could not be made by a physician alone, even one with immense theoretical knowledge. Diagnosing manic-depressive illness depended more on the variation of mental state (course) rather than the presence of certain symptoms. He stressed the importance of knowing the temperament of a patient prior to the onset of illness. For example, a patient previously “fiery” who turned calm and impassive would indicate the presence of disease; similarly, a patient historically “slow to respond [and] calm” turned “quick to answer [and] courageous” would allow physicians to conclude that the patient was ill. In addition to describing manic-depression, Ibn Imran stressed less standard and less obvious presentations that might today be considered as either Bipolar Disorder-Type II or Bipolar Disorder-Not Otherwise Specified. By developing diagnostic criteria for “soft” clinical presentations, Ibn Imran contributed novel attributes to the definition of melancholy, which were previously overlooked by esteemed physicians such as Rufus, and continue to be overlooked by clinicians today, though these presentations are far from rare.

1.5. Treatment

Following the Galenic tradition, Ibn Imran believed general treatment of melancholy (and seemingly, all diseases), required the balance of the fundamental elements (air, water, fire, earth) and the four humors. In this case, treatment for standard melancholy was achieved by the expulsion of black bile via purging. More specifically, each form of melancholy outlined in his treatise has a different treatment focus. In cases where Ibn Imran sees a cause of disease, today we would see symptoms of a disorder, such as mood changes, sleep disturbances, increased or slowed motility, excessive alcohol consumption, loss of interest in previously enjoyable activities, and others. Certain general treatment recommendations from his Treatise are consistent with those of today, especially regarding a healthy diet and regular exercise.

More than half of Ibn Imran’s manuscript (61%) is dedicated to the treatment of melancholy (46/76 pages). Of the 46 pages dedicated to treatment, 67% detail medicinal treatments, so that a total of 41% of this ancient manuscript’s focus was on medicinal therapy, emphasizing the prevalence of pharmacological treatment for disease long before the age of the pharmaceutical industry. Ibn Imran detailed numerous herbal prescriptions whose purpose was to combat the symptoms of melancholy, usually by purging or controlling the levels of black bile. Common ingredients in these prescriptions include Indian gall-nut, Polypodium vulgare (a type of fern), opium poppy, and various plant and nut oils. For example, one recipe meant to eliminate black bile is as follows:

Take fumaria (fumitory, fumewort), myrobalan, and dodder/epithyme; reduce all ingredients into a powder, then sift and knead with sesame, almond, squash seed, or violet oil. Next, mix this combination with violet sap; drink with warm water, or water with hyssop (an alimentation).

This prescription would be taken in a regular on-off pattern of several days to a typical total of 30 doses, as long as the melancholic condition persists.

1.6. Galenic theory then and now

Ibn Imran used Galenic theory to guide his treatment recommendations, usually seeking to increase or decrease hypothetically deranged humors. This general philosophy can be seen as rather similar to contemporary approaches to psychopharmacology: increasing or decreasing serotonin or norepinephrine activity through the various mechanisms of psychotropic drugs. Some observers call this approach “functional psychopharmacology,” and it is promoted in standard modern texts (Loonen and Stahl, 2011). But it does seem
rather Galenic, and as with the Galenic approach, is likely oversimplified. A more clinical approach to treatment—testing through clinical research and practice which drugs work best for which syndromes—is non-Galenic, and more nearly approximates the Hippocratic tradition which has conflicted with Galenic theory for the past two millennia (Ghaemi, 2008).

2. Conclusions

Ibn Imran’s discussion of melancholy, from the heart of the Middle Ages in one of the world’s most religious civilizations, is rather similar to later studies of melancholy in the “rationalist” world of the Enlightenment. There is much to ponder in the work of Ibn Imran, including recognition of how, in many ways, our current views differ little from our medieval forebears.

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Conflict of interest

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