

Melancholia in medieval Persian literature: The view of Hidayat of Al-Akhawayni

Behnam Dalfardi, Hassan Yarmohammadi, Ahmad Ghanizadeh

Behnam Dalfardi, Hassan Yarmohammadi, Student Research Committee, Shiraz University of Medical Sciences, Shiraz 7139748479, Iran

Behnam Dalfardi, Hassan Yarmohammadi, Research Office for the History of Persian Medicine, Shiraz University of Medical Sciences, Shiraz 7139748479, Iran

Ahmad Ghanizadeh, Research Center for Psychiatry and Behavioral Sciences, Shiraz University of Medical Sciences, Hafez Hospital, Shiraz 3478671946, Iran

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Iran. yarmohammadihassan@yahoo.com

Telephone: +98-917-3365275 Fax: +98-711-2122970

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Persian concept of melancholia is not well-known, this paper aims to review Al-Akhawayni's 10th century knowledge on melancholia which can represent the early concept of this disorder in the Near East.

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Key words: Al-Akhawayni; Bipolar disorder; Conversion disorder; Depression; Melancholia; Persian; Personality disorders; Psychiatry

Core tip: The 10th century Persian scholar, Al-Akhawayni Bukhari (?-983 AD), investigated melancholia and described its diagnostic and management methods. His explanations provide a good evidence for the early concept of this disorder in the Near East, a matter which has remained mainly neglected up to the current time.

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Abstract

"Melancholia" seems to be the oldest term used to describe the manifestations of depression. Throughout the history of medicine, melancholia has been the focus of consideration of many scholars who have provided varying definitions of this disorder and its manifestations. This continual process has resulted in the gradual development of the concept of melancholia over time. Persian scholars were among the scientists who have studied the melancholia and contributed to its concept. One figure, Al-Akhawayni Bukhari (?-983 AD), a Persian physician whose reputation was based on the treatment of patients with mental problems, investigated this disorder. He described Melancholia and explained its clinical manifestations and treatment methods. Al-Akhawayni provided an early classification of the patients suffering from this disorder. Since the medieval

INTRODUCTION

Melancholia has a long-standing history. A Swiss literary critic, Jean Starobinski (born in 1920), in his book entitled "Geschichte der Melancholie Behandlung von den Anfängen bis 1900" (The History of the Treatment of Melancholia From the Beginnings to 1900) and was published in 1960, estimated that this disorder traces its history back to the time of Homer (8th century BC)^[1]. This disorder is among the neuropsychiatric concepts that Persian scholars, especially those who lived during the "Golden Age of Islamic Medicine" (9th-12th centuries AD) which was the era of medicine flowering in the Islamic civilization, noted and contributed to its development^[2-4].

During this aforementioned time period, works of several Persian scholars, such as Rhazes (865-925 AD), Haly Abbas (949-982 AD), Avicenna (980-1037 AD), and Jurjani (1042-1137 AD) contributed to the development of various branches of medicine, including neuropsychiatric concepts. These works later affected European medicine^[2-6].

Some medical texts compiled during the zenith of Islamic medicine, such as “Kitab al-Hawi Fi al-Tibb” (Liber Continens) by Rhazes, “Al-Qanun Fi al-Tibb” (The Canon of Medicine) by Avicenna, and “Al-Kitāb Al-Malikī” (The Royal Book) by Haly Abbas, were used as main sources for medical education in the West. It is noteworthy to mention that in spite of these texts, other books written in this prominent historical era remained unnoticed until now^[7,8].

At the time when the Arabic language dominated scientific literature, Hakim Maysari (10th century AD) (the author of “Danishanah” or “Medical Poems”), Abu Mansur Muvaffak Harawi (10th century AD) (the author of “Kitab al-Abnyia an Haqaiq al-Adwiya” or “The Book of Remedies”), and Al-Akhawayni Bukhari (?-983 AD) (the author of “Hidayat al-Muta`llemin Fi al-Tibb” or “A Scholar’s Guide to Medicine”) provided the first three treatises written in Persian language. There is no doubt at all that among these books, Al-Akhawayni’s Hidayat (Guide) was the most important one^[9].

Al-Akhawayni, a well-known practitioner of his time, received much fame for his success in the management of patients with mental problems^[10]. In this paper we aim to explore the medieval Persian concept of melancholia through a discussion of the work of Al-Akhawayni Bukhari which can be representative of the early concept of this disorder in the Near East.

THE MODERN DEFINITION OF MELANCHOLIA

Today melancholia is known as a severe but biological-treatment-responsive type of a major depressive disorder^[11]. Based on the modern criteria of melancholia, these patients may present clinical manifestations including anhedonia, depressed mood with morning aggravation, sleep disturbance, disturbed psychomotor function (agitation or retardation), noticeable anorexia, significant weight loss, and marked guilt feelings^[11,12]. The present-day concept of melancholia is obviously indebted to the past studies on this issue, which changed the understanding of this disorder over time^[13].

THE EARLY CONCEPT OF MELANCHOLIA

Originally, the term “melancholia” is derived from two Greek words: “Melas” and “Chole” which mean “black” and “bile”, respectively. It is supposed that this word originated from the theories of Alcmaeon of Crotona (5th century BC), a Greek philosopher, theorist, and physician, who explained this disorder using the “Four Humors

Theory” (based on the existence of four liquids within the body). Later to him, on the basis of his observations, Hippocrates (460-337 BC) improved the previous theory of mental disorders and introduced the first categorization of these illnesses, including mania, melancholia, and paranoia^[14]. Hippocrates believed that patients with melancholia experienced a physical illness with manifestations including long-lasting sadness and fear, decreased appetite, sleeplessness, restlessness, and irritability^[14,15]. In his opinion, sexual intercourse, silence, and the avoidance of alcohol consumption were essential in the treatment of melancholia^[14].

The Greek philosopher, Plato (427-347 BC) also pointed to melancholia. Plato’s extant book entitled “Timaeus” (Dialogue) contains explanations of various mental disorders. He did not associate this condition to the black bile, and used the term “Melancholikos” for an individual who can’t be taught. Later, Aristotle (384-322 BC) (Plato’s scholar) in the book “XXX” (a work attributed to him) described melancholia as a condition resulting from the undue volume of black bile^[16]. He linked melancholia to innovations and intelligence. In his book, Aristotle put this question about melancholia to his readers: “Why do men who become masterminds in politics, philosophy, and the arts become melancholic...?”^[16,17].

After Aristotle, Aretaeus of Cappadocia (lived probably in the 1st century AD) explained melancholia as a condition which presents itself by manifestations such as significant sadness, sluggishness, and quietness not related to fever^[18]. He believed that melancholia and mania were two phenomenological kinds of one disorder. He also explained that in more intense stages, mania was melancholia’s presentation^[19]. Some centuries later, Alexander of Tralles (525-605 AD), a Byzantine physician, believed that melancholia and mania could present themselves in a cyclical pattern and even show mixed characters. He stated that mania, of course, was a more serious form of melancholia^[20].

These were among the early descriptions of melancholia. It is noteworthy that at that time, the concepts of the two disorders of mania and melancholia were broader than in the modern psychiatry of today. In ancient medicine, these words cover many disorders, including schizophrenia (some forms), schizoaffective disorder, depression, and some types of organic psychoses (all recent terms written in modern nomenclature)^[17,19].

BIOGRAPHY OF AL-AKHAWAYNI BUKHARI

Abū Bakr Rabīʾ ibn-e Ahmad Akhawaynī Bukhārī (?-983 AD), Abu Hakim (Father of Wisdom), or Joveini (in Latin) (Figure 1) was a Persian scholar who is best known for his works on the management of patients with mind problems^[10,21]. The city of Bukhara (now in Uzbekistan) was his birthplace^[22]. During the Persian Samanid Dynasty (819-999 AD), this city was one of the main academic centers of the Islamic World^[23]. Al-Akhawayni’s lifetime

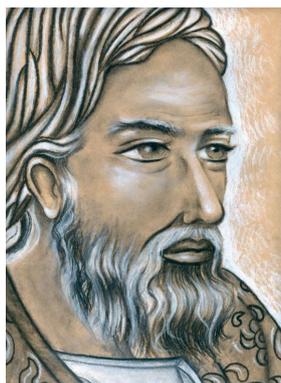


Figure 1 The imaginary portrait of Al-Akhawayni Bukhari (?-983 AD), by Miss. Mahtab Asabakhsh. (Reproduced with permission from Yarmohammadi *et al*^[21]).

was coincident with an age of compilation, original observations, and expansion (900-1100 AD) in Persian territories^[8]. By virtue of being a physician, Al-Akhawayni was a pupil of Rhazes^[24]. In spite of his familiarity with the theories of his predecessors, Al-Akhawayni approached to medicine using an experimental method^[21].

Al-Akhawayni's only surviving medical treatise, entitled "Hidayat al-Muta'llemin Fi al-Tibb" (A Scholar's Guide to Medicine), was the first medical text written in "Farsi Dari" (New Persian)^[24]. To the best of these authors' knowledge, this book is the only source of today's information regarding Al-Akhawayni's life.

Several chapters of the Hidayat are devoted to issues which provide an early description for some of modern-day known psychiatric disorders. This fact provides a good testament to the Al-Akhawayni's work in this field. "Mania" (Mania), "Malikhulia" (Melancholia), "Kabus" (Nightmare), "Ghotrab" (Dementia), and "Khonagh-o-Rahem" (Conversion Disorder) are among the psychiatric problems discussed in detail in Hidayat^[10,21].

Al-Akhawayni used features like loss of consciousness and orientation, and the presence of foam at the mouth to distinguish between episodes of seizure and conversion disorder. After illustrating normal personality characteristics, Al-Akhawayni described people with some types of personality disorders, such as those with antisocial personality disorder, dependent personality disorder, and paranoid personality disorder (all recent terms in current nomenclature). Al-Akhawayni explained that these conditions are not diseases, but are people's personalities. He correlated personality type to the brain and stated that personality characteristics can be controlled with training^[10,11,25].

It should be stated that, because of his success in the management of patients with mind problems, Al-Akhawayni became known as "Bejeshk-e Divanehgan" during his period of medical practice. This Old Persian term means "The Doctor of the Insane"^[10,21]. Al-Akhawayni pointed to this sobriquet in a chapter of the Hidayat entitled "Malikhulia" (Melancholia). He said: "...Don't be disenchanted, I've treated a large number of these patients and they have responded to my own recipes. For

this reason, they called me 'Bejeshk-e Divanehgan' (The Doctor of the Insane)..."^[10,25,26].

AL-AKHAWAYNI'S OPINIONS ON MELANCHOLIA

Melancholia is one of the psychiatric illnesses discussed in the book Hidayat (chapter of "Malikhulia"). Interestingly, according to Al-Akhawayni, melancholia results from the impact of black bile on the brain. Al-Akhawayni pointed to patients with main clinical manifestations including fear with no definite etiology, self-laughing, self-crying, and speaking meaninglessly (all these terms written in modern nomenclature). He explained that these patients were unable to answer questions or formulated wrong answers. Al-Akhawayni explained: "... Know the meaning of 'Malikhulia' (Melancholia) is fear without a known etiology, and this disease occurs without fever. They speak pointlessly and sometimes cry, and sometimes laugh at themselves, and when you ask them something, they can't respond, or tell a falsity and stick to it..."

Al-Akhawayni classified melancholics into the following three categories: Group 1: Patients who have experienced significant weight loss (in head and neck, not all of the body), hair loss, mutism, sadness, nervousness, and the inability to laugh. They have a suffered figure; Group 2: Patients who have experienced significant weight loss (in all parts of their body). Regarding Al-Akhawayni's statements, some of these patients may claim that they have stunning abilities. For example, they introduced themselves as a prophet or king. He explained that a number of these patients believed that they have turned into other beings, like hens and roosters, and mimicked their behaviors. Moreover, he stated that another subgroup of these patients claimed that unexpected events may occur in a short time. For instance, they believed that sky will fall soon, and they will put their hands above their heads to protect themselves; and Group 3: Patients who have experienced a significant increase in appetite, food regurgitation, and bloating in addition to the general manifestations of melancholia. Al-Akhawayni named this group of patients "Maraghi".

According to Al-Akhawayni's descriptions, this illness had a chronic nature, and patients may experience a recurrence of the disease episodes. As an example, Al-Akhawayni pointed to one of his patients who was a militaryman's son and suffered from this disease for a long time, as follows: "...For thirty years, continuously, I managed the son of a soldier ...".

In order to treat melancholia, Al-Akhawayni prescribed his own remedies in addition to the recipes recommended by his predecessors, including Galen (130-200 AD) and Rhazes. It was his opinion that nutritional factors can be influential on the course of melancholia. Al-Akhawayni believed that some foods, such as wholemeal bread, beef, and salted fish, can be beneficial to the melancholics' condition. Presently it is known that a high intake of $\omega 3$ polyunsaturated fatty acids can decrease the

Table 1 Comparison of the Al-Akhawayni's described groups of patients with melancholia to the DSM-5 for known neuropsychiatric disorders

Al-Akhawayni's classification of melancholia	Associated psychiatric disorders (based on DSM-5 criteria)
Group 1	Major depressive disorder with psychotic features
Group 2	Bipolar disorder with psychotic features Schizophrenia Delusional disorder
Group 3	Bipolar mood disorder, major depressive disorder, or eating disorders

risk of depression. The fish is a major source of such fatty acids in the human diet^[27].

Al-Akhawayni also prescribed some plant materials (either separately or in combination) for the management of melancholia. Celery stalk, fennel stalk, and cucumber are among his prescribed herbal medications for the management of melancholia. Remarkably, Al-Akhawayni claims that his own prescriptions for melancholics were more effective than those of the great scientist, Rhazes^[25].

DISCUSSION

A main feature of Al-Akhawayni's work was that for an early time in medical history, he related melancholia to the brain. He was able to classify melancholics based on their clinical findings. Noticing Al-Akhawayni's descriptions of melancholia and a comparison of it with the modern criteria for psychiatric disorders will show that similar to the time of his predecessors, the concept of melancholia at the time of Al-Akhawayni was broader than it is today. For instance, regarding Al-Akhawayni's classification of patients of melancholia, the clinical manifestations of the first group can be attributed to major depressive disorder with psychotic features; yet, some presentations of the second group are attributable to the clinical findings of bipolar disorder with psychotic features, or manifestations of schizophrenia. Delusion of grandiosity, somatic delusion, and depersonalization seem to be among the problems from which this group of patients suffers. Finally, the clinical findings of the third group are attributable to the bipolar mood disorder, major depression, or eating disorders (Table 1). In addition, Al-Akhawayni's explanations of the general features of the melancholics can be attributed to the presence of a labile mood in these patients^[11,17,19,25].

CONCLUSION

The tenth century Persian physician, Al-Akhawayni Bukhārī, discussed melancholia in his extant book, Hidayat. In addition to a familiarity with the knowledge of his predecessors, Al-Akhawayni presented different clinical features of these patients and their treatment. He claimed that his prescriptions for the treatment of melancholia were more effective than those of Rhazes. This fact can be related to his experimental approach to medicine.

Indeed, his detailed description of this disorder can represent the early knowledge of this disorder in the Near East. Al-Akhawayni was one of the early physicians who investigated psychiatry. He is the figure who fills the gap between Rhazes and Avicenna in the history of Persian medicine.

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