



Mental Health in the Islamic Golden Era: The Historical Roots of Modern Psychiatry

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Significance of Mental Health in Islam

In Islam, human beings are viewed as socially and religiously responsible in the sight of God. An individual is expected to fulfill many duties toward oneself, one's family, one's society, and toward God. One of the central Islamic legal maxims states, "Anything that is required to fulfill a mandatory duty is, itself, mandatory" [1]. Therefore, it is not surprising that physical and mental well-being have long been revered by Muslim scholars as they are considered prerequisites to fulfilling one's mandatory duties. A quick glance at the Islamic legal texts would reveal the considerable attention placed on sanity and the significance of mental capacity, being listed in almost every chapter as a prerequisite for fulfilling religious and social duties including rituals, financial transactions, marital contracts, and others.

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Additionally, “preservation of intellect/mental capacity” is regarded as one of the five major objectives of Islamic legislation in general (the other four are preservation of religion/faith, life, family, and wealth) [2]. Anything that was believed to negatively impact one’s intellectual faculties, such as intoxication, was discouraged or forbidden. Muslim scholars have even viewed strong emotional states such as severe anger as barriers to sound cognitive judgments, e.g., a judge is not to make judgments while in a state of anger [3]. The Quran and Hadith laid the foundations for such understanding.

This emphasis on mental and general health and well-being has many roots in the (revealed) Islamic tradition, i.e., the Quran and Hadith. The Quran and Hadith address general concepts related to illness and health, offering guidance for advancing knowledge on the subject. Hadith has opened the doors for people to look for cures for all illnesses. It emphasized that for every illness created by God, a cure was equally created [4]. Consequently, Muslims as early as the first converts following Prophet Muhammad in the 600s CE invested deeply in matters concerning healing and medicine. The way in which classical Muslim philosophers and scholars viewed health is similar to the definition suggested by the World Health Organization (WHO) which describes health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” [5]. Among many examples is that of the famous al-Balkhi from the ninth century who advocated for a balanced approach to well-being that takes into consideration both psychological and physical aspects of health [6].

A Comprehensive Outlook: Relationship of the Mind and Body

Recently, integrating behavioral and physical health has gained increasing attention and support through the establishment of programs that address both the mind and the body [7]. Many studies have documented the significance of the “mind-body” connection. For example, emotional states have been shown to impact the immune system’s response to infections [8]. Other studies have shown that psychological factors can influence cardiac conditions and promote adverse cardiac events [9]. Positive emotions have also been linked to less likelihood of developing physical illness including hypertension, diabetes, and respiratory infections [10]. While this remarkable acknowledgement of the mind-body connection has opened ways for advanced studies, it has fluctuated in its social acceptance among medical professionals.

In his 1997 book, *Timeless Healing*, contemporary pioneer of mind-body research and founding president of the Mind/Body Medical Institute at Harvard, Herbert Benson, strongly criticized Western science for disregarding the physical effects of beliefs and emotions. Describing these psychological processes as the work of the soul, he put forward the argument that a balanced approach for well-being must consider humans as emotional, spiritual, and intellectual beings [11]. This criticism is no different from that of Abu Zayd al-Balkhi’s nearly identical claim eleventh centuries

earlier. In his work titled “Sustenance of the Body and Soul,” al-Balkhi urged medical practitioners who were restricting health and treatment to physical characteristics to stop neglecting an ineluctable interaction of the body and the mind. Al-Balkhi’s assertion that the human being is composed of body and soul established the foundation for a psychophysiological approach to well-being in Medieval Islam [12]. Much of the medical work of Muslim scholars and philosophers is built upon this concept of sustaining both body and soul equally in order to attain balance and stamina for protecting against illnesses and preserving health.

Introducing the Concept of the Soul

Al-Balkhi’s explanations of the disturbances of both the body and the soul are instrumental for understanding the mind-body connection in an Islamic context. While the body experiences physical illness such as fever, headaches, and other pains that affect the organs, the soul experiences illnesses such as anger, sorrow, anxiety, fear, panic, and other similar psychological afflictions. When the body undergoes illness, it impacts the mental capacities of the soul, and when the soul is afflicted, it prevents the body from experiencing joy and may also manifest as physical illness in the body [12]. To al-Balkhi and the majority of Muslim scholars, the soul is synonymous with the psyche or mind with the addition of a spiritual component and is responsible for faculties such as thought, imagination, judgment, and memory. Abu Hamid Al-Ghazali (1058–1111 CE), one of the greatest philosophers in Islamic history, described the soul as made of four constituents: the heart, the spirit, the self, and the intellect [13]. Muslims are encouraged to engage in purifying the soul and its constituents in obedience to the Quran, which strongly suggests such purification is the means to true success (Quran 91:7–11, Oxford World’s Classics edition). The majority of Muslim philosophers and scholars attribute seeking purpose and meaning of life to the soul, considering the soul as one’s compass directing one toward attaining knowledge of God and ultimate happiness and success.

Religious and Philosophical Influences

In the pre-Islamic Middle East, illnesses of the soul or spirit were seen by the ancient Hebrew society as either a punishment for disobedience to God or as a divine gift. This is important because it sets the tone for primitive religious interpretations of mental illness. Renowned stories from the Old Testament, like that of Saul and David who were afflicted by madness, brought attention to mental disturbances, making them recognizable and to some degree socially acceptable. At the same time, warnings in the Old Testament such as “if you do not obey the Lord your God by diligently observing all his commandments and statutes which I lay upon you this day...The Lord strike you with madness, blindness, and bewilderment” (Book

of Deuteronomy 28:15, 28, New International Version) shaped the concept of madness in the Medieval Middle East.

Psychopathological behaviors were explained and understood by what was believed to be their causes: disease, sin, or demons. Healing was dependent on God and those who can heal were considered to have a gift from God. For example, Jesus of Nazareth earned the reputation as “a charismatic teacher, healer and exorcist” [14]. Exorcism became a common practice in the early Judeo-Christian tradition. When Islam was introduced in Mecca, the Quran and guidance of Prophet Muhammad reformed many practices and conceptualizations of God. For instance, instead of viewing illnesses as a punishment from God, Islam taught that people may be tested with their health and wealth and will be rewarded for their patience (Quran 2:155, Oxford World’s Classics edition) and that with disease, pain, or illness comes expiation of sins [15]. However, while the Quran does not point to miraculous healing, demon possession, or exorcism like in the Old and New Testaments, it does acknowledge the existence of elusive, omnipresent spirits or jinn, leaving room for the imagination of later Muslims.

The concept of saints did not exist in the Islamic tradition until the century following Prophet Muhammad’s death when the Islamic empire stretched to include cultures from southern Spain to northern India. The synthesis of beliefs and practices of many different people, including supernatural beliefs and magical arts, influenced and altered some customs such that sainthood, miraculous healing, and exorcism eventually emerged among the Muslim people. Accounts of miraculous healing especially among elite Arabs led some Muslims in the early Islamic period to resort to Christian saints for healing [14]. However, it was the East Christian doctors trained by Galenic teachings who were appointed positions in the court and government to teach and translate the Greek texts as the Muslims of ruling classes ardently sought to acquire the ancient knowledge. By the eighth century, princes, khalifs, and emirs not only pursued culture with profound interest but especially indulged in the treasures and delights of the intellectual culture. They were eager to translate the Greek medical texts that they received as gifts and acquired during expeditions. Syriac translations were one of the first sources for translations of Galenic texts into Arabic which marked the beginning of one of the greatest translation movements [16]. The House of Wisdom in Baghdad is where the majority of the translations of all the world’s classical knowledge into Arabic took place through the eighth to the tenth century.

The efforts to preserve Greek medicine promoted Greek philosophy throughout the ninth and tenth centuries, enabling Muslim scholars to integrate Greek scientific knowledge into their medical education. The teachings of Galen which emphasized the physiological causes of illness and its physical treatments were maintained at the basis of the Islamic curriculum. However, unlike the Greek tradition, which is mainly known for its observations and theories, the Muslims built upon their interest to test the ancient theories along with their own, thus establishing the first scientific method of experimentation [17]. By the ninth century, when the compilation and authentication of the Hadith culminated in Baghdad, medicine was approached

by Muslim scholars through consideration of Greek philosophical and scientific tradition combined with the theological principle that God is the ultimate creator of all things. This accommodated the Islamic interpretation of divine cause and effect and restricted methods of research and treatment to those which upheld physical laws while also in accordance to Islamic law [14].

It was through the adherence to Islamic law that early Muslims heartily invested in the expansion of all scientific knowledge, flourishing into the renaissance of Islam, also known as the Islamic Golden Era. From 622 to 1492 A.D., this golden time period in a vast empire that stretched across Arabia, Iraq, Syria, Lebanon, Palestine, Egypt, and much of North Africa, Central Asia, Spain, and the fringes of China and India was inextricably linked to religion. The interest to combine faith and reason through the use of *independent reasoning*, a legal concept known as *ijtihad*, opened channels of tolerance for scientific enquiry. Schools were attached to every mosque and education became institutionalized teaching medicine, pharmacology, botany, geology, geography, sociology, chemistry, physics, mathematics, astronomy, literature, and philosophy. In this Islamic empire, individuals of learning took precedence over all others irrespective of race, religion, or nationality [17, 18]. Learning seemed to have become the chief business of life for the ruling classes: they were statesmen, philosophers, jurists, authors, scientists, and scholars [18]. The major cities of the Islamic empire were recognized as international centers for culture, learning, and enterprise, becoming centers for dissemination of knowledge and advancement of civilization. Muslims, Christians, and Jews from all parts of the world came to these centers with the same rights to learn civilization and science, mastering the Arabic language to do so [17–19]. Arabic was the official language of science for five centuries hence the coined concept of Arabic Science despite the numerous contributions made by renowned non-Arab scientists and scholars.

Classification and Conceptualization of Mental and Psychological Illnesses

Overview of Major Scholars and Treatises

In 2008, the International Institute of Islamic Thought (IIIT) undertook a major project, the largest of its kind, in which more than 200 psychological manuscripts, written by Muslim scholars, spanning the second to the fourteenth centuries A.H. (110–1350 A.H./8–20th A.D.), were surveyed and annotated, yielding a three-volume publication titled “Psychological Sciences in the Islamic Heritage” [20]. This work highlighted the great interest that Muslim intellectuals took in understanding normal and abnormal psychological functioning and in promoting well-being. The treatises examined in this work could be classified into three domains: a philosophical domain, a medical domain, and a domain that addresses moral, spiritual, and ethical matters.

In the philosophical domain, a large number of treatises addressed an array of psychological topics such as the nature of the soul, conceptualization of the mind and its mental and cognitive faculties, interpretations of dreams, and defining concepts such as happiness, among many others. Authors cited in this domain include scholars like Ibn Rushd (Averroes), ibn Sina (Avicenna), al-Farabi, al-Kindi, Miskawayh, and others, all of whom have drawn upon Greek philosophy as well as contributed their own ideas and views. Within the medical domain existed treatises that profoundly impacted medical education in Europe for many centuries. These include ibn Sina's "The Canon of Medicine" and al-Razi's "The Comprehensive Book of Medicine." These two main medical encyclopedias contained chapters that provided detailed accounts of mental illnesses as they were recognized at their times. Symptoms and etiologies for such illnesses as well as treatments and various types of interventions were listed and described.

Finally, considering the *heart*, *soul*, and *spirit* combined as a major component of human existence, many Muslim scholars dedicated volumes and treatises to topics in the third domain relating to morality, spirituality, and ethics. Al-Ghazali, Al-Muhasibi, Al-Balkhi, and Ibn Hazm among others were especially renowned for their work in this domain that not only defined and described the various spiritual, moral, and emotional diseases but also prescribed treatments and preventative antidotes for them. Examples of such topics within these treatises are training one's desires and resisting temptations, managing anger, processing grief, and overcoming anxiety, to name a few. These are familiar topics that are comparable to much of what is published today in psychological literature, as they are considered significant from contemporary psychological perspectives as well.

There are many other remarkable books and treatises that, despite not receiving as much attention, were written by renowned scholars and elaborated greatly on mental health and illness which contributed to these three domains. In an effort to illustrate the vast work and array of topics addressed by the early Muslim scholars, the authors have composed a humble list of scholars along with their relevant books and treatises and a brief overview of some of their mental health contributions (Table 1.1).

Categories of Mental and Psychological Illnesses

It is very well understood that classification and reclassification of mental disorders is an ongoing process. For example, the Diagnostic and Statistical Manual of Mental Disorders (DSM), which is the most popular diagnostic system for mental disorders in the USA, underwent numerous text revisions in the course of over 60 years and is currently in its fifth edition. These revisions and editions paralleled the changes that were taking place in the WHO's International Classification of Diseases (ICD), which is currently undergoing its 11th revision to be published in 2018. While revisions continue to take place, these successive editions witness the regrouping of existing illnesses into modified categories, the addition of new illnesses, and in some cases the elimination of certain illness upon reevaluation [21]. It was with this

Table 1.1 Contributions of major scholars and treatises

Scholar	Alternate Name	Date (AD)	Relevant Books/Treatises	Contribution
1	Yā' qub Ibn Ishaq al-Kindi	(801–870)	On Sleep and Dreams; On Dispelling Sadness; Discourse on the Soul	Major translation efforts Major treatise on understanding and combating sorrow Dream psychology
2	Ali Ibn Sahl Rabban al-Tabari	(838–870)	<i>Firdous al-Hikma (Paradise of Wisdom)</i>	One of the first and oldest encyclopedias of medicine A chapter on “diseases of the head and the brain” Mind-body connection Doctor-patient relationship Perceptions and emotions Child development
3	Abu Bakr Muhammad ibn Zakariyya al-Razi (Rhazes)	(865–932)	<i>Al-Hawi fi al-Tibb (The Comprehensive Book of Medicine)</i> ; Al-Mujarrabat; Al-Tibb al-Mansuri; Al-Tibb al-Ruhani	The largest medical encyclopedia written by a Muslim A chapter on “diseases of the head” including neurological and psychiatric illnesses Mind-body connection Practical experiences of treating patients Psychological, moral, and emotional illnesses and their treatments Music therapy for mental illnesses
4	Abu Zayd al-Balkhi	(850–934)	<i>Masalih al-Abdan wa al-Arjus (Sustenance of the Body and Soul)</i>	Distinction between mild and severe mental illness Detailed account of four mental disorders: anger, sadness, fears/phobias, and obsessional disorders A pioneer of cognitive therapeutic approaches Mind-body connection
5	Abu Nasr Muhammad ibn al-Farabi	(870–950)	<i>Al-Madina al-Fadila (The Virtuous City)</i>	Psychological and mental faculties Philosophy of happiness Dream psychology Social psychology

(continued)

Table 1.1 (continued)

Scholar	Alternate Name	Date (AD)	Relevant Books/Treatises	Contribution
6 Abu Bakr Rabee Ibn Ahmad Al-Akhwyni Bokhari		(Unknown – 983)	<i>Hidayat al-Muta'allimin Fi al-Tibb (A Guide to Medical Learners)</i>	Significant interest in mental disorders (was called “the doctor of the insane”) A variety of brain diseases and mental illness among other types of illnesses
7 'Ali ibn 'Abbas Al-Majusi (Haly Abbas)	Haly Abbas	(930–994)	<i>Kamil al-Sina' a al-Tibbiya (The Complete Book of the Medical Art)</i>	A systematic and practical medical book A wide range of neurological and psychiatric disorders Mind-body connection Doctor-patient relationship Medical ethics
8 Ahmad Miskawayh	Miskawayh	(930–1030)	<i>Tahdhib al-Akhlaq (The Refinement of Character); Al-Fawz al-Asghar (The Diminutive Triumph)</i>	Pioneer of moral philosophy and ethics Emphasis on psychological well-being Psycho-spiritual treatments for anxiety and depression Epistemology
9 Abu Ali al-Husayn ibn Sina (Avicenna)	Avicenna	(980–1037)	<i>Al-Shifa (Healing); Al-Qanun fi al-Tibb (The Canon of Medicine); Risala fi al-Nafs (Treatise on the Soul)</i>	A pioneer of Islamic philosophy One of the most comprehensive accounts written by a Muslim scholar on the nature and faculties of the “self” A canonical medical encyclopedia Mind-body relationship Diseases of the brain Perceptions Emotions Dreams Conditioning Individual differences

10	Abu Hamid Al-Ghazali (Algazel)	Algazel	(1056–1111)	<p><i>Ma'arifi al-Quds fi Madarij Ma'rifat al-Nafs (The Ascent to the Divine Through the Path of Self-Knowledge);</i> <i>Ihya' Ulum al-Din (The Revival of Religious Sciences);</i> <i>Kimya's al-Sa'ada (The Alchemy of Happiness)</i></p>	<p>A pioneer of religious ethics and Islamic philosophy Comprehensive approaches to behavior modification and self-discipline Philosophy of happiness The nature and faculties of the "self"</p>
11	Zayn al-Din al-Jurjani		(1040–1136)	<p><i>Zakhireye-i Kharazmshahi (The Treasure of Khwarazm Shah)</i></p>	<p>Sleep psychology and physiology Psychology of emotions, e.g., anger, shame, laughing and crying, sadness and happiness, etc. A wide range of neurological and psychiatric illnesses, as well as therapeutic techniques, e.g., music, psychotherapy, occupation therapy, and environmental modifications Biochemical view of mental illnesses</p>
12	Ibn Al-Ayn Zarbi		(Unknown – 1153)	<p><i>Al-Kafi fi al-Tibb (The Sufficient Book of Medicine)</i></p>	<p>Physical and mental illnesses and their treatments Biological basis of mental disorders</p>
13	Fakhr al-Din Muhammad 'Umar al-Razi	Al-Razi	(1150–1210)	<p><i>Kitab al-Nafs Wa al-Ruh wa Sharh Quwahuma (Book on the Soul and the Spirit and their Faculties);</i> <i>Al-Matalib al-'Aliya (The Higher Aims)</i></p>	<p>Psychology of pain and pleasure; Physiognomy; Cognitive and behavioral treatment for moral illnesses Individual differences</p>

same diligence that early Muslim scholars, philosophers, and physicians defined and categorized psychological and mental disorders.

In the early classifications that emerged in the twentieth century, mental disorders were conceptualized as either binary forms or sometimes as a continuum of psychoses or neuroses [21–23]. Exploring the classical Islamic literature with these two broad categories in mind (neurosis and psychosis), psychotic illnesses were frequently found in the medical domain under brain disorders, while neurotic illnesses were mainly covered within the moral, spiritual, and ethical domain. Discussions of each category of illnesses in its respective domain indicate how Muslim scholars conceptualized and further treated mental illnesses. Illnesses in medical treatises were thought to have organic causes, i.e., body humors, temperament changes, etc., and they were usually prescribed *somatic treatments* such as medicines, herbs, syrups, physical interventions, etc. [24]. Whereas neurotic illnesses, such as sadness, anxiety, phobias, and obsessions, were considered part of the ethical and spiritual domain, and were prescribed cognitive and behavioral-like treatments [6]. The following section will briefly elaborate on early establishments and methods used for providing treatment and care to individuals undergoing mental illnesses.

Providing Treatment and Care

Hospital Care

Historically, there have been many institutions for the mentally ill, two of which are insane asylums and psychiatric hospitals. The former has ceased to exist in mainstream medicine as its main function was to keep mentally ill citizens away from society. The latter method of institutionalizing mental illness, perpetuated in the modern day, was begun by Muslim physicians in the eighth century.

The early Islamic society was efficient in providing care for individuals with mental illnesses. Hospitals were supported by the community with an endowment known as a *waqf*. The first psychiatric ward in the world was established in 705 CE in Baghdad as part of the Islamic hospital system and soon became a mainstay of most Islamic hospitals from that time onward. Through its continual assertions of scientific competence, the Islamic hospital furnished an intellectual base for an independent field of studying insanity, a specialty known to no other institution. Islamic hospitals became hubs for research, offering apprenticeships for students and disseminating the “true science” of cerebral illnesses. Subsidized by the Islamic government, Islamic hospitals were not only advancing medicine through scientific research but also serving the mentally ill and the poor as obliged by Islamic law, “And do not give the weak-minded your property, which Allah has made a means of sustenance for you, but provide for them with it and clothe them and speak to them words of appropriate kindness” (Quran 4:5, Sahih International edition). This commandment and others like it in the Quran were at the base of

formulating the general attitude toward mental illness and treatment of individuals with mental illnesses.

The creation of psychiatric wards in the Muslim world then inspired the creation of stand-alone psychiatric institutions, the first of which referred to as Bimaristan was established in Baghdad in the ninth century by the Abbasid Caliph Harun Al-Rashid [14, 25]. These Islamic psychiatric institutions became famous for their humane and “moral” treatment of patients – particularly their emphasis on inclusion and not isolation. The Islamic psychiatric institution was also famous for introducing the concept of the psychiatric milieu: providing patients with clean clothes, daily bathing, purposeful activities, and a healthy diet [26]. These institutions are also credited with the introduction of novel treatments like music therapy and massage therapy in addition to treatment by medication and talk therapy during daily visits by physicians. Also unique was the interdisciplinary nature of the treatment team, which, in addition to the physician, often included members to whom we would today refer as nurses, social workers, chaplains, and pharmacists – treating the whole patient, and not just their illness.

It is noteworthy that the Islamic hospital was a secular establishment where mental illness was attributed to organic pathology [25]. The mentally ill were housed in these hospitals during this era, whereas the neighboring Christian empire would house the mentally ill in monasteries [27]. It is important to note that these institutions were purposefully often located in the heart of town in order to facilitate visitation by family, in keeping with their emphasis on inclusion within the society. Great care was taken to make sure that the psychiatric hospital was decorated with lavish gardens and flowing fountains in order to bring a sense of calm to the ill. All of these services were fully paid for by the Islamic government for any of its mentally ill residents for the duration of their illness, even if it spanned a lifetime. The funding for these institutions was derived from the obligatory yearly alms (zakat) paid by Muslims.

Throughout the Golden Age of Islam, reputable hospitals were found in all the major cities across the Muslim world such as in Damascus, Alexandria, and Cairo [28]. One of the most famous was the Qalawun Hospital in Cairo, Egypt. It was established in the 1280s and was part of a larger complex including a *madrassa* (school), a hospital, and a mausoleum [29]. The families of patients were often involved in the care of their afflicted relatives, whether this was at home with a medical assistant or in the hospitals as supporting visitors [28]. The inclusion of the mental health ward in a general hospital rather than in separate asylums normalized mental illness, making it merely another affliction that needed treatment. People were less inclined to demonize those with mental illnesses or feel the need to cast them out because there were available facilities to care for them.

Many hospitals were concerned with providing support that would grant their patients some aspects of normalcy. Human interaction was found to be an effective treatment, and therefore individuals were assigned companions known as *Murafiqeen*, to help patients with hygiene, eating, and emotional support. The word *murafiqeen* roughly translates to “escorts” or “companions,” which

clarifies the fact that their role was to care for the patients and not to act as a handler. Additionally, entertainers such as storytellers and musicians were employed by hospitals for the benefit of the patients. They delivered services that were therapeutic in nature and created a soothing environment. These were early versions of music and talk therapy, which have proven to be successful in modern times.

Somatic Therapies

Believing that mental derangements are physical or organic in nature, Muslim physicians tended to prescribe somatic treatments upon analyzing the symptoms presented by their patients. The literature reveals numerous case studies and clinical interactions from which physicians based much of their treatment practices. Detailed chronicles were recorded to describe physiological and pathological information regarding individual cases and their management. Such clinical experiences were often passed on between physicians and teachers, adding to a bank of medical knowledge and references. Medical treatises strongly suggested that each physician was well aware of the practices used by others in their field.

For each illness described in the texts, there were records of prescribed treatments along with the dosage recommendations, duration, and a list of medicinal ingredients. Medicine was made available in a variety of forms such as creams, herbal mixtures, solid pills, and liquids. Along with the herbal and organic medications, other somatic therapies that were commonly recommended included exercise routines, relaxing environments (i.e., established through music and garden walks), and activities such as storytelling and singing.

Records also indicate that it was common to prescribe a combination of therapies for a balanced and comprehensive treatment. For instance, ibn Sina gives detailed instructions for conducting phlebotomy to treat melancholia while at the same time instructs his patients to take baths or use hot oils and furthermore engage in practices that strengthen the heart. References to such a combination of somatic therapy with other therapies (e.g., behavioral and psychotherapeutic practices) indicate just how comprehensively physicians approached treating their patients with mental illnesses.

Psychotherapy

Ibn Hazm asserts that the universal goal of “being free from anxiety” is what drives people to take action in life [30]. Al-Balkhi also highlighted that even “normal people” are plagued with psychological symptoms, such as anxiety, anger, and sadness, most of which are learned behaviors and are related to how different people react to emotional stress. His detailed discussions on changing one’s faulty thinking and

irrational beliefs, which are responsible for their emotional states, were at the core of his development of cognitive therapy eleventh centuries ago [12]. Numerous texts by Muslim scholars described cognitive components of depression and sadness, anxiety and fear, obsessions, and anger in detail and suggested a variety of therapies and treatments.

Al-Balkhi's groundwork in developing cognitive therapy included a number of features that are recognized in today's modern therapy. For instance, his preventative approach which encouraged individuals to keep healthy cognitions handy for use during times of distress is compared with today's "rational cognitive therapy" [12]. In addition, he and other prominent early Muslim scholars such as Al-Ghazali, al-Kindi, Ibn Hazm, and Ibn Taymiyyah demonstrated practices of reciprocal inhibition in their treatments which is fundamental for today's behavioral therapy. Miskawayh, one of the first Muslim ethicists from the tenth century CE, established a theory describing the changeability of human behavior to promote using discipline. This was foundational for many later works that focused on changing behaviors, attitudes, and manners through processes of learning, training, and gradual steps of behavior shaping [30–34].

Moral development was a significant branch of Islamic psychotherapy. Many scholars dedicated monographs to address behavioral and ethical development. These included detailed descriptions of ethics and methods for acquiring higher morality as well as moral illnesses, such as self-centeredness, lust, avarice, etc., and methods for treating them [30, 32, 35]. Scholars like Al-Ghazali defined moral development as a means not of suppressing all forms of desires and needs but rather of practicing balance and self-discipline [32]. Religious beliefs were also known to have a very strong impact in shaping a person's emotions and behaviors [30].

Described along with self-discipline were concepts of reinforcement, reward, and punishment. For example, al-Razi distinguished between the experiences of internal positive reinforcement and external positive reinforcement when learning new behaviors and manners [36]. Understanding and utilizing reinforcers are essential to the Western theories of behaviorism, which was only developed in the late nineteenth century. Works of Miskawayh and Ghazali, for example, describe a strategy similar to what is now known as "response cost" to eliminate undesired behaviors, such as punishing/purifying oneself through psychological, physical, or spiritual means like paying money to the poor, fasting, etc. [32, 35]. While it was not uncommon to incorporate such religious rituals into therapeutic treatments as they are directly in adherence to the Quran, some Muslim scholars, philosophers, and physicians integrated many of their inherited Greek doctrines, despite some religious controversy. For instance, the Greek medico-musical tradition influenced Muslim philosophers like al-Kindi, to make music a part of the allopathic system of treatment, despite it being disliked by a number of interpreters of the Islamic law [14]. These examples are only a few that illustrate the genesis of theories and practices of psychotherapy adopted by intellectuals of this time with the infusion of diverse traditions.

Conclusion

Despite the appearance of a European renaissance independent of outside influence, Islamic sciences played an integral role in the Renaissance. Early generations of intellectual historians coined the concept of “ancient science” as distinguished from the “Islamic sciences,” emphasizing a rich development of scientific activities in the early Islamic civilization. A fair look into the written works of early Muslim scholars reveals a plethora of remarkable scientific, medical, philosophical, and psychological contributions to the field of mental health transcending geographical, cultural, language, and religious boundaries. While this chapter brought to light a number of pioneering scholars and canonical treatises that explored and defined psychological illnesses, foundational theories such as that of the mind-body connection, and treatment approaches to well-being from an Islamic lens, it only tapped into the vast bank of knowledge surrounding mental health from the Islamic Golden Era. The magnificent contributions of this time period are understudied and underutilized. They reflect a holistic, culturally adaptive, scientific approach that would undoubtedly enlighten the contemporary interdisciplinary field of psychiatry and enhance its practice.

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