

# Medieval Islamic scholarship and writings on sleep and dreams

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**Abstract:**

Islamic civilization between the 7<sup>th</sup> and the 15<sup>th</sup> centuries made great contributions to the development of science and medicine, and discoveries made during this time formed the basis for the emergence of the European Renaissance. Muslims view sleep as one of the great signs of *Allāh*, and a number of Muslim scholars studied and wrote on sleep and dreams. However, Muslim scholars' contributions to this topic have not been adequately represented in modern scholarship. Islamic scholars did far more than simply act as the preservers of the antiquity and Greek knowledge, but rather laid significant foundation, translation, interpretation, and transference of knowledge and experience, and have contributed original works in many fields of science and medicine including sleep. This brief article introduces some of the writings by Muslim scholars and philosophers about the importance of sleep, some sleep disorders, and dreams.

**Keywords:**

Arab, dreams, Islam, medieval, Muslim, sleep

Islam looks at sleep as one of the great signs of the Creator (*Allāh*) and asks followers to study this sign (for details, the readers are referred to two recent reviews).<sup>[1,2]</sup> One verse in the *Qur'an* says, "And among His signs is your sleep by night and by day and your seeking of His bounty, verily in that are signs for those who hearken" (*Sūra*: 30, verse: 23).<sup>[1]</sup> Following this, a number of Muslim scholars developed an interest in sleep as a sign of the greatness of the Creator and explored sleep and dreams in their writings. This topic did not receive the attention it deserves in the modern literature. Therefore, we wrote this short communication to review some of the contributions of the middle age (medieval) Muslim scholars to the understanding of sleep and dreams.

Islamic civilization prevailed between the 7<sup>th</sup> to 15<sup>th</sup> centuries and covered three continents from China in the East to Spain in the West, including areas in Far East Asia.<sup>[3,4]</sup> The development of medieval

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Islamic medicine was an important step in the evolution of science, as it adopted and improved upon techniques from older civilizations and served as the basis for the later emergence of European civilization during the Renaissance. Unfortunately, a significant part of this scientific heritage was lost during the Mongol invasion (1258 C.E.).<sup>[5]</sup> It has been estimated that <1 in every 1000 books from the time survived the invasion.<sup>[6,7]</sup> The destruction of this scientific heritage has been instrumental in the lack of proper representation of Muslim writings on medicine in European academia and modern literature. In addition, lack of proper acknowledgement of Muslim scholars' contribution to medicine by recent scholars added to the underrepresentation of Muslim writings. This review is a step in the documentation of Muslim scholars' writings on medicine.

## Sleep

Several Muslim scholars and scientists showed great interest in the impact of

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sleep on health and contributed to the knowledge of the importance of sleep – these scholars include *Rhazes* (Muhammad ibn Zakariya al-Razi, 854 CE– 925 CE), *Ibn al-Jazzar* (898-980 C.E.), *Avicenna* (*Abu Ali Al-Hussain Bin Ali Ibn Sina*, 980-1037 C.E.), and *Ibn al-Ash'ath* (death 975 CE).

The Canon of Medicine (Arabic: *al-Qānūn fī at-Tibb*) is an encyclopedia of medicine in five books compiled by the Muslim philosopher *Avicenna* (Ibn Sina).<sup>[8,9]</sup> It is considered the first book to designate a chapter (chapter 9 in the first book) to the care of the aged, titled “Regimen of Old Age.” In this chapter, Avicenna stated that “old folk need plenty of sleep.” He also wrote, “Time spent on the couch should be liberal, more than is legitimate for adults.” He described in the same chapter some techniques to assist individuals in falling asleep; one such technique is “A bath taken after the digestion of a meal, plenty of hot water poured over the head.” The chapter also outlined behavioral and pharmacological approaches to treating insomnia and includes allusions to treating patients with circadian rhythm problems. For example, he described how to modify sleep of persons who become accustomed to sleeping in the daytime. He stated that if one is used to sleeping during the daytime, the change to night sleep should be gradual and not abrupt, a suggestion that concurs with modern medicinal approaches. He also stressed the importance of taking a moderate amount of sleep and warned against excessively short and long sleep, as well as the impact of sleep deprivation on mental functions: “Healthy persons should pay attention to sleep. It must be moderate, properly timed, and excess must be avoided. They must avoid remaining awake too long, which might result in injuring mental faculty” and stressed the detrimental effect of sleep deprivation on mental functions.<sup>[8]</sup> In fact, Islam teaches its followers to be moderate and balanced in all aspects of life including religion, worship, relationships, ideas, and daily activities. A verse in the *Qur'an* says “Thus, We have made you (Muslims) a justly balanced community that you will be witnesses over the people and the Messenger will be a witness over you” (Sūra: 2, verse: 143).<sup>[10]</sup>

Moreover, he described important sleep hygiene techniques and tips “the deep sleep after the passage of food from the stomach and after ridding off flatulences and eructations, for to sleep on this is detrimental in many ways; it keeps the person turning from side to side, bringing harm to the person. Thus, a walk before sleeping to ensure digestion is recommended. It is also bad to go to sleep on an empty stomach.”<sup>[8]</sup>

Sleep posture was clearly indicated in the Canon of Medicine. Avicenna preferred right side posture sleep in accordance with the practices of the *Hadith* (a narrative

concerning the words and deeds of Prophet Muhammad peace be upon him (pbuh)). He added an excellent description of the side effects of sleeping in the supine position, which agrees with the current understanding of sleep postures. He mentioned that persons who sleep on their back have their mouth open as the muscles, which keep the jaws closed, are too weak to maintain them in the closed position. This is now understood as a classical description of patients with the condition obstructive sleep apnea (OSA). Moreover, he described that sleeping on the back can lead to stroke, paralysis, and nightmares – also symptoms and complications of OSA.<sup>[11]</sup>

*Ibn al-Ash'ath* is another distinguished Muslim scholar who realized the importance of sleep in maintaining good health. He wrote a book titled *Quwa al-Adwiyah*, in which he discusses the general principles and regulations for treatment, explaining that the principles involved with sickness and health are the air we breathe, sleep and wakefulness, rest and motion, infusion, and evacuation.<sup>[12]</sup>

One of the sleep problems that received great attention in different cultures is sleep paralysis. Sleep paralysis is a rapid eye movement parasomnia characterized by inability to move at sleep onset or upon awakening.<sup>[13]</sup> It is frequently accompanied by frightening hallucinations; therefore, it is called nightmare (*kabus* in Arabic Islamic literature). In medieval ages, sleep paralysis was viewed in several cultures as a devil sitting on the chest of the sleeper.<sup>[14]</sup> It is commonly accepted in current literature that sleep paralysis was first described by Isbrand van Diemerbroeck, a Dutch physician (1609–1674).<sup>[15]</sup> However, *Rhazes* provided a detailed description of sleep paralysis in *Kitab Al-Hawi fi al-Tibb* (known in Europe as *Liber Continens*, a major Arabic work on medicine, which is 25 volumes long) a long time before van Diemerbroeck. In *Liber Continens*, *Rhazes* stated, “When the nightmare (*kabus*) happens, the person senses a heavy thing upon him and finds himself unable to scream.”<sup>[16]</sup> In medieval times, theologians believed that evil powers were the cause of nightmares and sleep paralysis.<sup>[17]</sup> *Abubakr Rabi ibn Ahmad Akhawayni Bokhari* (?–983 CE) challenged this in his book *Hidayat al-muta`allemin fi al-Tibb* (Learner’s guide to medicine), in which he designated a chapter to nightmares and sleep paralysis. He attempted to scientifically analyze the etiology of sleep paralysis and discuss the available therapeutic approaches to resolving it.<sup>[18,19]</sup>

Another Muslim scholar, *Ibn al-Jazzar* (known in Latin as *Algizar*), wrote an entire book on sleep disorders and sleepiness that was unfortunately lost.<sup>[20]</sup> In his other book on sexual diseases and their treatment, *Ibn al-Jazzar* wrote a chapter on the nocturnal emission

of sperm during sleep, focusing on the mechanism of their emission (chapter 4).<sup>[21]</sup> He writes in the chapter, "A nocturnal emission occurs only when one has a long and deep sleep. If, however, one does not have a quiet sleep but is frightened or awakened during any part of it, one will not emit much sperm [or at least not enough] to require ritual purification from it."<sup>[21]</sup> In *Kitab Al-Hawi fi al-Tibb*, *Rhazes* discusses nocturnal enuresis (bed-wetting) in detail.<sup>[22]</sup> He mentioned that bedwetting occurs in deep sleep due to relaxation of the muscles around the bladder outlet and the bladder being weak and unable to hold urine.<sup>[22]</sup> He also discussed methods for avoiding bedwetting, which included avoiding fluids at night and avoiding heavy sleep.<sup>[22]</sup> Moreover, in refractory cases, he proposed injecting some medications into the bladder through the urethra.<sup>[22]</sup>

## Dreams

The *Qur'an* uses several terms to refer to dreams such as *ru'ya* (vision), *hulm* (dream), *manam* (sleep), and *bushra* (tidings). Muslims consider some dreams to be a kind of spiritual perception. One *Hadith* says that the Prophet (pbuh) said, "A good dream vision of a pious man is a forty-sixth part of prophecy" (Sahih Muslim 2263). Another *Hadith* by the Prophet (pbuh) said, "A good vision (*ru'ya*) is from *Allāh* and a bad dream (*hulm*) is from Satan; so if one of you sees anything (in a dream which he dislikes), he should spit on his left side thrice and seek refuge with *Allāh* from its evil, and then it will never harm him" (Sahih al-Bukhari, 3118). In addition, the *Qur'an* describes the dream stories of Prophet *Yūsuf* (Joseph) (pbuh), and these passages provide some of the most important references to dream interpretation used by Muslim scholars. The *Qur'an* further describes the Prophet Abraham receiving a dream, in which he is instructed to sacrifice his son, and Prophet Muhammad (pbuh) dreaming on the night before a battle.<sup>[2]</sup> Dream interpretation, or oneiromancy, has become an established science in Muslim literature. Muslims use the Arabic terms *Tabir* or *Tafsir* to describe dream interpretation.

A number of Muslim philosophers and thinkers emerged in the field of dream interpretation. Theories, understandings, and observations of dreams proposed by Muslims over the past 1500 years correspond with many of the recent theories developed by current psychologists<sup>[23]</sup> *Ibn Arabi* (1164-1240 C.E.) devised a metaphysical system merging Islamic theology with Greek philosophy.<sup>[24,25]</sup> The most famous dream interpreter in Islamic history is *Ibn Sirin* (653-728 C.E.).<sup>[25,26]</sup> *Ibn Sirin's* system for dream interpretation reflects the fact that both the *Qur'an* and *Hadith* teach Muslims to respect the spiritual and psychological significance of the dream experience. *Ibn Sirin* thought

that the interpretation of the content of a dream depends on the personal characteristics and life circumstances of the dreamer, as well as on the meaning of the dream itself.<sup>[25]</sup> *Ibn Khaldūn* (1332-1402 C.E.), a great Muslim scholar and thinker, considered dream interpretation to be a science.<sup>[27]</sup> In his monumental work *Muqaddimah* (*An Introduction to History*), he divided dreams into three types: first, those from God (*Allāh*): dreams that are clear and unmistakable in their meaning and content. Second, those from Angels: dreams that are received in the form of allegory and require interpretation. Third, those from Satan: these dreams are confusing and futile.<sup>[27,28]</sup>

## Conclusion

From a historical point of view, the medieval Islamic world is responsible for significant scientific accomplishments. Islamic scholars did far more than simply act as the preservers of the antiquity and Greek knowledge, but rather laid significant foundation, translation, interpretation, and transference of knowledge and experience, and have contributed original works in many fields of science and medicine, including sleep.<sup>[29]</sup> It will be important for future studies on the subject to elucidate the legacy of Islamic scholars in the development of modern Western medicine, among many other scientific advancements. Such scholarship should be in-depth and passed on from one generation to the next.

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## Conflicts of interest

There are no conflicts of interest.

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