

Qur'anic insights into sleep

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Abstract: Sleep has preoccupied and fascinated many civilizations since the dawn of mankind. Here, we critically review the various elements pertaining to sleep in the context of early Islamic religion and culture. The many principles of sleep hygiene, wellbeing and health associated with adequate sleep, and the understanding of sleep as a dynamic state are all apparent from such explorative process of Islamic tradition.

Keywords: sleep, Islam, Qur'an, fasting, Hadith, Ramadan

Introduction

Religious literature is rich in descriptions of sleep, and sleep practices and habits are usually influenced by culture and religion.^{1,2} Islam considers sleep to be one of the great signs of the creator (Allāh) and asks followers to explore this sign. One Qur'anic verse 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" (30.23).

The two sources of Islamic legislation are the Qur'an and the Hadith. The Qur'an contains 114 sūrat, which were revealed from God (Allāh) to the Prophet Muhammad, peace be upon him (pbuh), through the angel Gabriel between 610 and 632 CE. The Hadith are the narrations concerning the words and deeds of the Prophet (pbuh) and are an important tool for understanding and interpreting the Qur'an.³ The Hadith were appraised and gathered mostly during the eighth and ninth centuries. Note in this work that Qur'an citations are two digits separated by a period; the first is the sūra number, and the second is the verse number (sūra.verse). For the Hadith citations, we refer to the cited book and the Hadith number.

Other religions and cultures may have rich references to sleep and sleep habits.^{1,4,5} However, this article uses citation of the Qur'an and Hadith as the main sources of Islamic jurisdiction to summarize the traditional Islamic views of sleep and discuss the similarities with contemporary sleep research.

Importance of sleep

Modern medicine has demonstrated that sleep has essential physiological functions, and sleep deprivation has deleterious effects on a number of bodily functions.^{6,7} However, Islamic literature first emphasized the importance of getting enough sleep at night approximately 1400 years ago. Several Hadith by the Prophet Muhammad (pbuh) stressed this point. One Hadith in Sahih Al-Bukhari (SB) states that the Prophet (pbuh) told one of his companions who was praying the whole night to "Offer prayers and also

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sleep at night, as your body has a right on you” (SB 1874). Another Hadith says, “If anyone of you feels drowsy while praying he should go to bed (sleep) until his slumber is over” (SB 210). A third Hadith describes how the Prophet (pbuh) entered the Mosque and saw a rope hanging between its two pillars. He said, “What is this rope?” The people said, “This rope is for Zainab who, when she feels tired, holds it (to keep standing for the prayer.)” The Prophet (pbuh) said, “Don’t use it. Remove the rope. You should pray as long as you feel active, and when you get tired, sleep” (SB 1099).

Sleep habits in Islamic culture

Going to bed early and waking up early are strongly encouraged in Islamic culture. The sleep pattern of Muslims is influenced by prayer times. Muhammad (pbuh) encouraged his companions not to be active after the darkness (Isha) prayer (approximately 2 hours after sunset). The Prophet (pbuh) reportedly said, “One should not sleep before the night (darkness) prayer, nor have discussions after it” (SB 574). Muslims are required to perform five obligatory prayers (As-Salāt) daily during certain times of the day. Following prayer times strictly influences sleep time and light exposure. Islamic prayer times were originally set according to the movement of the sun. Because of the tilt of the earth, its rotation and revolution around the sun, the various latitudes of the earth’s locations, and daylight savings time, the times for these obligatory prayers are not fixed and are influenced by the season and the location.⁸

- Dawn (Fajr) prayer time starts when white light spreads at the horizon in the east (about 1.5 hour before sunrise).
- Dhuhr prayer time starts when the sun has declined westward from the middle of the sky (zenith).
- Asr prayer: Its time starts when the shadow of an object becomes equal to that of the object itself, in addition to the length of the shadow of the object when the sun was at zenith.
- Maghrib prayer time starts when the sun sets.
- Isha prayer time starts when the red light is gone from the western horizon, and lasts until the rise of the “white light” (true dawn) on the eastern horizon. It is preferred to pray Isha before midnight, but most Muslims pray Isha around 2 hours after sunset.

The timing of prayers is mentioned collectively in the Qur’an. One verse states “Perform As-Salāt (prayer) from mid-day till the darkness of the night (ie, the Dhuhr, Asr, Maghrib and Isha prayers), and recite the Qur’an in the early dawn (ie, the morning Fajr prayer)” (17.78). During Ramadan (the fasting month), Muslims fast from Fajr until

sunset (Magrib). Fajr time is stated in one verse “and eat and drink until the white thread (light) of dawn appears to you distinct from its black thread (darkness of night); then complete your fast till the nightfall” (2.187). Hadith stated the timings of obligatory prayers as well. One Hadith reported that the Prophet (pbuh) said: “Gabriel (pbuh) led me in prayer at the House (ie, the Ka’bah). He prayed the noon prayer (Dhuhr) with me when the sun had passed the meridian to the extent of the thong of a sandal; he prayed the afternoon prayer (Asr) with me when the shadow of everything was as long as itself; he prayed the sunset prayer (Maghrib) with me when one who is fasting breaks the fast; he prayed the night prayer (Isha) with me when the twilight had ended; and he prayed the dawn prayer (Fajr) with me when food and drink become forbidden to one who is keeping the fast. On the following day he prayed the noon prayer (Dhuhr) with me when his shadow was as long as himself; he prayed the afternoon prayer (Asr) with me when his shadow was twice as long as himself; he prayed the sunset prayer (Maghrib) at the time when one who is fasting breaks the fast; he prayed the night prayer (Isha) with me when about the third of the night had passed; and he prayed the dawn prayer (Fajr) with me when there was a fair amount of light. Then turning to me he said: Muhammad, this is the time observed by the prophets before you, and the time is anywhere between two times” (Sunan Abu-Dawud).

In the medieval ages, astrolabes, quadrants, and sundials all evolved and developed in Islamic countries (Figure 1A and B). Muslim scholars developed special features by means of which they were capable of calculating the timings of Muslim prayers and the direction to Makkah (Ka’bah).⁹ The developed astrolabe could be calibrated and used at different geographical locations to calculate year-long prayer times.¹⁰ Nevertheless, electronic clocks are used currently in mosques to help determining prayer times (Figure 2).

A proportion of Muslims follow prayer times strictly and wake up early on weekdays and weekends for dawn prayer. Summer nights are shorter due to an early dawn, hence Muslims who pray Fajr on time may have less night-time sleep during the summer.¹¹ Therefore, during the summer, some Muslims wake up to pray Fajr on time and then sleep until work time. A recent study assessed sleep architecture and daytime sleepiness in subjects who split sleep due to the Fajr prayer and reported no differences in sleep architecture or daytime sleepiness in the consolidated and split-sleep schedules when the total sleep duration was maintained.¹¹

The Prophet (pbuh) also reportedly dimmed the light during sleep. One Hadith says, “Put out lamps when you

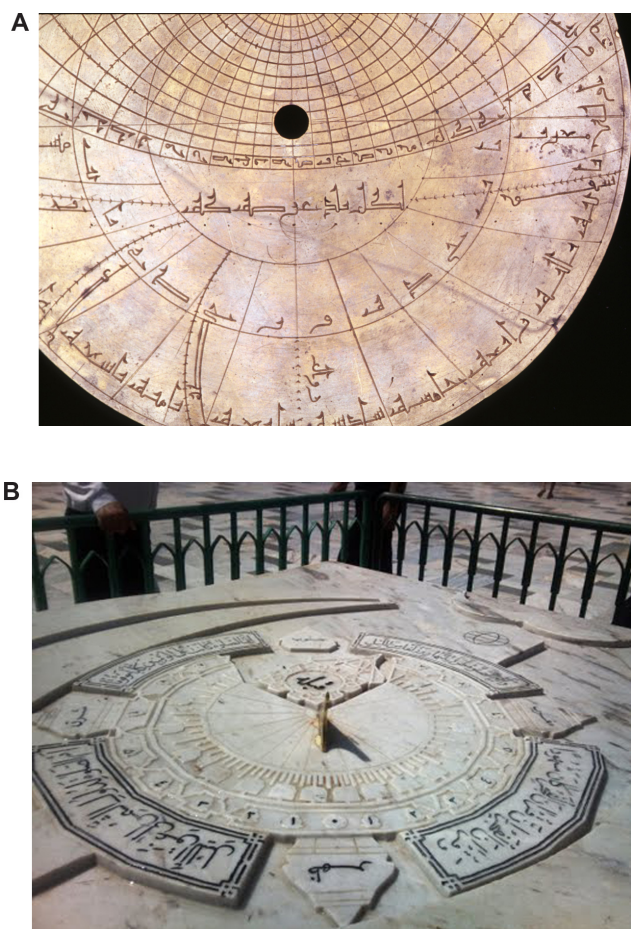


Figure 1 (A) Astrolabe has been used to determine prayer times and the direction of Makkah. (B) Sundial of prayer time.

go to bed” (SB 5301). This may indicate the importance of maintaining a dark environment during sleep to maintain circadian rhythms.

Types of sleep in the Qur'an

“Sleep” is frequently described by several different terms and descriptions in the Qur'an. Modern medicine describes several stages of sleep; however, ancient people also observed and described different sleep states. Deep analysis of the different descriptions of sleep in the Qur'an reveals that the metaphors refer to different states of sleep, which may reflect different types or levels of sleep.

- **Sinah:** A verse in Qur'an uses the word sinah when describing Allāh. “No slumber (Sinah) can seize Him nor sleep” (2.255). Sinah has been defined as slumber or dozing off for a very short period after which arousal due to any environmental stimulant is prompt. In the Qur'an, sleep implies a manifestation of weakness and signals that the body needs rest. Therefore, while the Creator does not



Figure 2 Electronic clocks have been used recently in mosques to determine prayer times.

sleep or doze off, His creations, including mankind, need sleep every day.

- **Nu'ass:** This term appears twice in the Qur'an to describe sleep. One verse says, “Remember when He covered you with a slumber (nu'ass) as a security from him” (8.11). This verse describes how slumber (nu'ass) provided believers with feelings of security during a period of fear and stress. The other verse says, “Then after the distress, He sent down security upon you. Slumber (nu'ass) overtook a party of you” (3.154). Interpreters describe the word nu'ass as a short nap, which may indicate a state of sleep deeper than sinah. Recently, researchers have postulated that short naps could reduce stress and blood pressure, with the main changes in blood pressure occurring between lights off and sleep onset.¹²⁻¹⁴
- **Ru'qood:** The Qur'an describes the sleep of the People of the Cave (as'hab al-Kahf), who are known in Christian literature as “the Seven Sleepers of Ephesus”.¹⁵ When these young believers asked Allāh for mercy, He directed

them to seek refuge from prosecution in a cave. Then, He put them into a sleep state. The Qur'an describes their sleep with the following verse: "And you would have thought them awake, whereas they were asleep (ru'qood)" (verse 18.18). The most appropriate interpretation of the term ru'qood is "sleep for a long period". Indeed, the Qur'an stated that the People of the Cave stayed in their cave for three hundred (solar) years, ie, 309 lunar years (18.25).¹⁶

- Ho'joo: This term indicates sleep at night. The Qur'an describes pious believers who fear Allāh in the following verse: "They used to sleep but little by night (ho'joo). And in the hours before dawn, they were (found) asking (Allāh) for forgiveness" (51.17–18).
- Su'baat: The Qur'an describes human sleep in one verse as su'baat: "And we made your sleep (su'baat) as a thing for rest" (78.9). In Arabic, the word su'baat is derived from the word sabb, which means disconnecting.¹⁷ Therefore, su'baat may indicate a disconnection from the surrounding environment during sleep or a higher arousal threshold.

Naps

Qai'lullah is the word used in Islamic literature to describe a midday nap. Qai'lullah is a well-established Islamic practice, and it may take on a religious dimension for some Muslims. One Hadith by the Prophet (pbuh) says, "Take a short nap, for Devils do not take naps" (Sahih Aljamie. Alalbani 1647). Another Hadith provides details about appropriate timing for a nap: "Sleeping early in the day betrays ignorance, in the middle of the day is right, and at the end of the day is stupid" (Fath Al-Bari). Recent studies have shown that short daytime naps improve vigilance, cognitive function, and memory consolidation and reduce mortality related to coronary artery disease.^{12,18} A few studies conducted in Saudi Arabia revealed that napping is a common practice there, even among children.^{19–21} A study of medical students in Saudi Arabia revealed that 52% nap regularly.¹⁹ Wali et al have shown previously that up to 88% of adult Saudis nap in the afternoon.²¹

Circadian rhythm

The alternation of day and night is mentioned in 37 places in the Qur'an, and several instances consider the succession of night and day to be a sign of the greatness of the Creator and ask people to observe it. One verse says: "Do they not see that We made the night that they may rest therein and the day giving sight? Indeed in that are signs for a people

who believe" (27.86). In the Qur'an, the word "night" always precedes the word "day". One verse says, "And it is He who has made the night and the day in succession for whoever desires to remember or desires gratitude" (25.62). It is clear that the Qur'an considers humans to be diurnal individuals who need light in the daytime and darkness at night. For example, another verse states, "And it is He Who makes the night a covering for you, and the sleep (as) a repose, and makes the day nushūr", ie, getting up and performing daily work after sleeping at night (25.47). The Qur'an stresses the importance of the circadian pattern of light and darkness and considers the cycle of night and day to be a gift from Allāh, "Say: See ye? If Allāh were to make the Night perpetual over you to the Day of Judgment, what God is there other than Allāh, who can give you enlightenment? Will ye not then hearken? Say: See ye? If Allāh were to make the Day perpetual over you to the Day of Judgment, what God is there other than Allāh, who can give you a Night in which ye can rest? Will ye not then see? It is out of His Mercy that He has made for you Night and Day – that ye may rest therein, and that ye may seek of His Grace – and in order that ye may be grateful" (28.71–73).

Sleep and death

The Islamic literature indicates some similarities between sleep and death. One of the Qur'an verses states, "It is Allāh Who takes away the souls (Wafat) at the time of their death, and those that die not during their sleep. He keeps those (souls) for which He has ordained death and sends the rest for a term appointed. Verily, in this are signs for people who think deeply" (39.42). The Qur'an uses the term "Wafat" to describe death. Islamic scholars divided Wafat into sleep (temporary death) and death (real death). Thus, the above verse indicates that while Allāh takes and retains souls during real death, He releases souls after sleep for an appointed term. The Hadith support this interpretation. One Hadith reported that whenever the Prophet (pbuh) went to bed, he said, "O' Allāh, it is with Thine Name that I live and it is with Thine Name that I die", and when he awoke, he said, "Praise is due to Allāh, Who gave us life after our death (sleep) and unto Thee is resurrection" (SM 2711).

Ramadan fasting and sleep

Voluntary fasting, or the abstinence from food, drink or both, is practiced in many religions and cultures. Researchers have long recognized that experimental fasting alters the sleep-wakefulness pattern in various species. For example, food deprivation has been shown to increase wakefulness

and markedly reduce rapid eye movement sleep.^{22–24} Fasting during the holy month of Ramadan is the fourth pillar of Islam, and more than 1.5 billion Muslims worldwide fast during Ramadan every year from dawn to sunset.^{25–27} The effects of experimental fasting cannot be generalized to Islamic fasting during Ramadan due to Ramadan's unique characteristics:²⁶

- The fasting duration is influenced by the season in which Ramadan occurs.²⁶ Ramadan is one of the 12 Hijra months in the Islamic lunar calendar year. The Hijra year is 11 days shorter than the Gregorian year; therefore, Ramadan occurs in a different season every nine years.²⁶ The season during which Ramadan occurs influences the length of fasting, because daytime is longer in summer than in winter.
- The geographical locations influence the fasting. As we move away from the equator, daytime becomes longer in summer and shorter in winter.²⁶
- Ramadan fasting is distinguished by an abrupt change in eating habits; caloric intake increases at night, which may influence the circadian pattern of body temperature and nocturnal sleep.²⁸
- The fasting protocol during Ramadan may influence sleep, as Muslims rise for the predawn meal (suhur).²⁹
- Several changes in habits and lifestyle occur during Ramadan in some Islamic countries, such as delaying the start of work, shortening the working hours, and opening of stores and shopping malls until late at night.³⁰

All of these factors indicate that the physiological and behavioral changes occurring during the month of Ramadan may be different from those in experimental fasting.³¹

Many Muslims associate fasting during Ramadan with increased daytime sleepiness. However, studies that assessed daytime sleepiness objectively in fast performers revealed no increase in daytime sleepiness compared with baseline when nocturnal sleep duration was maintained.^{29,32} Studies using sleep diaries have shown a delay in bedtime and rise time during Ramadan.^{29,30} A recent objective study that assessed sleep patterns continuously during Ramadan in a natural environment (ie, not in the laboratory under controlled conditions) using actigraphy-like device reported a delay in bedtime and wakeup time during Ramadan.³²

The exclusive eating of meals at night during Ramadan has been proposed to cause increases in body temperature at night and thereby delay the circadian patterns of body temperature and sleep.³³ In addition, lifestyle changes like delay in starting schools and work, increased social and commercial activities until late at night, broadcasting popular programs

on television channels until dawn, conducting Ramadan prayers at night and sometimes until 2–3 am, have been suggested as potential causes of delay in circadian rhythms during Ramadan.^{26,30} A study assessed the chronotype of fasting individuals during Ramadan in Saudi Arabia using the Horne and Östberg questionnaire and reported a clear trend toward a decrease in morning types and an increase in evening types during Ramadan.³⁰ Studies that monitored body temperature as a marker of circadian pattern during Ramadan^{28,33,34} reported a delay in the occurrence of acrophase and a reduction in the amplitude of core body temperature during Ramadan.^{28,33} Two studies that assessed sleep architecture during Ramadan using polysomnography demonstrated a significant reduction in REM sleep.^{29,33}

Dreams

The Islamic culture is extremely interested in dreams. Dream interpretation (oneiromancy) is an established science in Muslim literature, and a number of Muslim philosophers and thinkers have emerged in the science of dream interpretation [eg, Ibn Arabi (1164–1240 CE), Ibn Sirin (653–728 CE), and the great Muslim scholar and thinker Ibn Khaldūn (1332–1402 CE) who considered dream interpretation to be a form of science.^{35–38} Ibn Sirin is the best-known dream interpreter in Islamic history,^{36,38} and his method of dream interpretation relies on the interpretation and understanding of the Qur'an and Hadith. He linked the interpretation of dreams to the personal characteristics and life circumstances of the individual.³⁶ In general, Muslims hold dreaming in a much higher regard than Western societies.^{36,39,40} Indeed, Muslims consider dream vision to be a kind of supernatural perception. One Hadith quotes the Prophet (pbuh) as having said, “A good dream vision of a pious man is a forty-sixth part of prophecy” (Sahih Muslim 2263). The Prophet (pbuh) has also been reported to have said, “A good vision (ru'ya) is from Allāh and a bad dream (hulm) is from the Satan” (SB 3118). Currently, Muslim use the terms Tabir or Tafsir for “dream interpretation”, and dreams continue to play an important role in the lives of modern Muslims.^{39,40} A study assessing the role of visions in contemporary Egypt reported that religiously revelatory dreams remain a widespread phenomenon.³⁹ The investigators reported that this phenomenon was not observed among the uneducated or those with a naively superstitious mentality; quite the opposite, the studied group were well educated, technologically proficient, and psychologically healthy.³⁹ The author described the studied group: “believe that the ability to receive visions through dreams and in the waking state is a faculty that is latent in

human beings, whose attachment to material things clouds their receptivity to impulses from the spiritual realm”.³⁹ Another recent study in university students in the United Arab Emirates showed that dreams are taken seriously by young Muslims.⁴⁰ The study reported that dreams influenced the participants’ personal life, daily plans, and making decisions related to their social life.⁴⁰ This is a strong indication that the traditional Islamic ideas about dreams are alive and well preserved in the minds of modern Muslims.

The Qur’an uses a few terms that imply “dream”, such as ru’ya (vision, verses 17.60, 37.105, 48.27 and 12.43), hulm (dream, verses 21.5, 12.44), manam (sleep, verses 37.102 and 8.43) and bushra (tidings, verse 10.64). Because of the Qur’an’s central role in Muslim faith, discussions of dreams and dreaming are fundamental to Islamic dream interpretation and understanding.

In three sūrat in the Qur’an, dream descriptions play a major role in dream interpretation:

- Sūra 12, Yussuf (Joseph [pbuh]): This sūra provides a condensed version of the story of Joseph (pbuh) and some of the most famous references to dream interpretation. When Joseph (pbuh) said to his father, “O my father, indeed I have seen (in a dream) eleven stars and the sun and the moon; I saw them prostrating to me” (12.4). And the dreams of the two young men who went to prison with him: “And there entered the prison with him two young men. One of them said: Indeed, I have seen myself (in a dream) pressing wine. The other said: Indeed, I have seen myself carrying upon my head (some) bread, from which the birds were eating. Inform us of its interpretation; indeed, we see you to be of those who do good.” (12.36). Joseph (pbuh) interpreted the dreams for the young men: “O two companions of prison, as for one of you, he will give drink to his master of wine; but as for the other, he will be crucified, and the birds will eat from his head. The matter has been decreed about which you both inquire” (12.41). A third dream is the dream of the king: “And (subsequently) the king said, “Indeed, I have seen (in a dream) seven fat cows being eaten by seven (that were) lean, and seven green spikes (of grain) and others (that were) dry. O eminent ones, explain to me my vision, if you should interpret visions” (12.43). Joseph (pbuh) interpreted the king’s dream: (Joseph) said, “You will plant for seven years consecutively; and what you harvest leave in its spikes, except a little from which you will eat. Then will come after that seven difficult (years) which will consume what you saved for them, except a little from which you

will store. Then will come after that a year in which the people will be given rain and in which they will press (olives and grapes)” (12.47–49).

- Sūra 37, As-Sāffāt (Ranks): This sūra focuses on Allāh’s command to Prophet Abraham (pbuh) to sacrifice his son. “And when he reached with him (the age of) exertion, he said, “O my son, indeed I have seen in a dream that I (must) sacrifice you, so see what you think.” He said, “O my father, do as you are commanded. You will find me, if Allāh wills, of the steadfast” (37.102–107).
- Sūra 8, Al-Anfāl (Spoils): This sūra describes a dream of Prophet Muhammad (pbuh) the night before a particular battle when the Muslim army was across the valley from their enemy. “(And remember) when Allāh showed them to you as few in your (ie, the Prophet’s) dream; if He had shown them to you as many, you would surely have been discouraged, and you would surely have disputed making a decision. But Allāh saved you” (verse 8.43).

We recommend that scientists interested in sleep explore the religious literature to understand the views, behaviors, and practices of ancient people regarding sleep and sleep disorders. Investigating ancient religious views of sleep may not only raise new questions about sleep and sleep behavior but also help address unanswered questions about sleep. Future research should address the effects of adhering to religious teachings on sleep and health in general.

Disclosure

The authors have no conflicts of interest to declare in this work.

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