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THE EFFECT OF SLEEP QUALITY ON MEMORY AND ITS REVIEW FROM ISLAMIC PERSPECTIVE

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Abstract

The purpose of this study was to determine the effect of sleep quality on memory and its impact on Islamic perspectives. This study was an observational analytical study with a cross-sectional design, where observations of both variables were conducted only once at the same time. The sample was determined using a purposive sampling technique. The data collection instruments used were a questionnaire to assess sleep quality, the Pittsburgh Sleep Quality Questionnaire (PSQI), and direct tests to assess respondents' memory function using the CERAD and MoCA-Ina. The data were analyzed using univariate and bivariate analyses. The results showed: (1) The majority of respondents, 107 (88.4%), had poor sleep quality, and 14 (11.6%) had good sleep quality. (2) There was no significant relationship between sleep quality and memory function, with a p-value > 0.05. (3) According to Islamic perspective, implementing sleep patterns in accordance with the recommendations of the Prophet Muhammad (peace be upon him) is believed to improve sleep quality and thus enhance one's quality of life.

Keywords: Islamic View, Memory, Sleep Quality

Introduction

Sleep can be defined as a state in which the body loses consciousness and regains consciousness when receiving sensory or other stimuli.[1] During sleep, responses to external stimuli are reduced, and movement is relatively inactive.[2] This gives the body the opportunity to restore the energy it has expended during the day's activities. In addition to restoring energy, sleep has other benefits such as repairing the body, regulating hormones, physical recovery, reducing stress, repairing cells, conserving energy, improving concentration, and increasing endurance.[3]

Sleep patterns and duration vary from person to person. This is influenced by several factors, such as age, work demands, social engagement, mental and somatic conditions, and individual physiological characteristics.[4] Generally, the ideal sleep duration for young adults aged 18-25 is around 7-9 hours per night.[2] With age, a person's sleep duration and need decline. These changes in sleep duration and need, along with influencing factors, have the potential to lead to a decline in sleep quality, which is common in young adults.

Several aspects of sleep quality can be assessed. These include efficiency, latency, duration, post-sleep wakefulness, sleep disturbances, use of sleeping medication, and daytime dysfunction.[5] These aspects are characteristics that shape sleep quality. Sleep quality is considered good if there are no signs of sleep deprivation, such as difficulty concentrating, feeling unrefreshed upon waking, or the emergence of health problems.[5] Good sleep quality can improve mood, the ability to relax normally, and social and emotional interactions with others.[6]

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Research shows that a large proportion of medical students worldwide experience sleep disorders. Results vary based on year of study and geodemographic location. Among Chinese medical students, approximately 90% or more report feeling sleepy during the day in class, and approximately 35.5% of Malaysian students, which is more common in clinical students. In Hong Kong, medical students have an average nighttime sleep duration of 6.6 ± 1.2 hours; as many as 70% of them complain of sleep deprivation. Poor sleep quality has been reported in 16% of Malaysian medical students, 40.6% of Iranian medical students, with the highest prevalence among medical interns, 62.6% of Indian students, and 77% of Pakistani medical students.[4]

Adequate sleep helps maintain concentration, executive cognitive function, sensorimotor integration, and memory processes [4], while short sleep duration can impair the brain's ability to process new information received through hearing. This suggests that when someone is performing a task involving working memory, distracting sounds or irrelevant auditory input may be less disruptive than when performing it while sleep-deprived.[7]

Islam views sleep as a blessing from Allah SWT and a vital means of rest for physical and spiritual recovery. Sleep is a basic human need due to its vital role. Maintaining the quality and quantity of sleep is crucial for optimal body function.[8] This is based on the Qur'an, Surah Al-Furqan/25:47 “It is He who has made the night for you as a covering, and sleep for rest, and He has made the day for waking up and striving.”

According to Ibn Kathir's interpretation, the phrase "He it is Who has made the night a covering for you" implies that the night serves to conceal and cover your body. The phrase "and sleep for rest" implies that all movement ceases to rest and the body recovers, as all body parts and five senses experience fatigue from the numerous movements of daily activities seeking a living. When night falls and the atmosphere becomes calm, all movement calms and rests, leading to drowsiness, followed by sleep. Sleep provides rest for both the body and the soul. The phrase "He made the day for waking and striving" implies that humans engage in daytime activities to earn a living through effort and work.[9]

During sleep, the brain is given a period of rest. Significant information is stored, enabling the classification, organization, and consolidation of newly encoded memories.[10] Physiologically, memories are gradually strengthened during sleep because sleep provides the brain with the opportunity to repair damage caused by free radicals that occurs while awake. This process influences changes in the amount of neurotransmitters that play a role in the connection between the hippocampus and neurocortex, given that the brain is non-regenerative and cannot replace damaged cells with new ones.[2] Sleep disturbances, poor quality sleep, and sleep deprivation will impact a person's ability to think clearly and concentrate, which in turn impacts memory function.

Essentially, memory has three stages of formation: encoding, consolidation, and retrieval. During sleep, memory functions, including spatial memory, recognition memory, long-term memory, short-term memory, and prospective memory, are maintained and strengthened. Several studies have shown that short sleep can reduce hippocampal activation during the encoding phase of wakefulness, resulting in impaired memory retrieval even after one night of recovery sleep.[11] Based on the above description, researchers are interested in examining the relationship between sleep quality and memory, entitled "The Effect of Sleep Quality on Memory."

Method

The population in this study were all students of the Faculty of Medicine, Universitas Yarsi. The sample was selected using a purposive sampling technique using the Lemeshow formula. The inclusion criteria were that students who agreed to participate in the study were active students of the Faculty of Medicine, Universitas Yarsi, and willing to complete the research questionnaire. To maintain data validity, students who consumed alcohol, central nervous system stimulants, or caffeine within eight hours prior to the study, or who used sleep aids within the previous 24 hours were excluded from this study. Therefore, the total sample size was 96.

The type of data used in this study was primary data, collected directly by the researcher. The data collected were sleep quality (independent variable) and memory (dependent variable). Data were collected through two methods: direct and indirect measurement. Direct measurements were used to collect data on respondents' memory function using the Consortium to Establish a Registry for Alzheimer's Disease (CERAD) and Montreal Cognitive Assessment – Indonesia (MoCA – INA) tests. Indirect measurements were used to collect data on respondents' sleep quality using the Pittsburgh Sleep Quality Questionnaire (PSQI).

The data collection instruments used were a questionnaire to assess sleep quality, the Pittsburgh Sleep Quality Questionnaire (PSQI), and direct tests to assess respondents' memory function using the CERAD and MoCA – INA.

Data analysis was conducted using univariate and bivariate analyses. Univariate analysis was used to describe or provide an overview of the frequency of each variable, including sleep quality and memory. Thus, bivariate analysis was used to evaluate and determine the existence of a relationship between the two variables, namely sleep quality and memory. The methods used in this analysis were the Independent T-test for normally distributed data and the Man-Whitney test if the data were not normally distributed.

Results

Univariate Test Result

The contents of the research results reveal research findings based on field data obtained using questionnaires, surveys, documents, interviews, observations and other data collection techniques. The results at least contain an element of what/how, whether the data presented has been processed (not raw data), presented in the form of tables or pictures (choose one), or descriptive research and given information that is easy to understand. Write down the findings, but don't discuss the discussion here.

Table 1 Frequency Distribution of Gender and Force

Characteristics	Frequency	Percentage
Sex		
Man	24	19,8%
Woman	97	80,2%
Grade		
2023	83	68,6%
2024	38	31,4%

The table above shows that female respondents (80.2%) outnumbered male respondents (19.8%). The majority of respondents were from the class of 2023, at 68.6%.

Table 2 Frequency Distribution of Sleep Quality

Sleep Quality	Frequency	Percentage
Good	14	11,6%
Bad	107	88,4%
Total	121	100%

Respondents' sleep quality was divided into two categories: good and poor. Good sleep quality was defined as a PSQI score ≤5. Based on the questionnaire results from the table, 107 respondents (88.4%) had poor sleep quality, while only 14 respondents (11.6%) had good sleep quality.

Table 3 Frequency Distribution of CERAD Word List Trial Results

CERAD *Word List Trial*	Frequency	Percentage (%)
Normal	99	81,8%
Disturbed	22	18,2%

In this subtest, respondents were asked to recall and name the same 10 words three times. The results were categorized into two categories: normal and impaired. Ninety-nine respondents (81.8%) fell into the normal category, while 22 (18.2%) fell into the impaired category.

Table 4 Frequency Distribution of Delayed CERAD Results

Delayed CERAD	Frequency	Percentage (%)
Normal	100	82,6%
Disturbed	21	17,4%

In this subtest, respondents were asked to recall and recite 10 previously given words after a period of several minutes. The results were categorized into two categories: normal and impaired. A total of 100 respondents (82.6%) fell into the normal category, while 21 respondents (17.4%) fell into the impaired category.

Table 5 Frequency Distribution of CERAD Recognition Results

CERAD Rekognition	Frequency	Percentage (%)
Normal	109	90,1%
Disturbed	12	9,9%

In this subtest, respondents were asked to identify 10 previously memorized words from a list containing a mix of old and new words. The results were categorized into two categories: normal and impaired. A total of 109 respondents (90.1%) were classified as normal, while the remaining 12 respondents (9.9%) were classified as impaired.

Table 6 Frequency Distribution of MoCA Forward Digit Span Results – Ina

Forward Digit Span MoCA – Ina	Frequency	Percentage (%)
Normal	111	91,7%
Disturbed	10	8,3%

In this subtest, respondents were asked to repeat a series of numbers read by the examiner sequentially from the beginning. The results were categorized into two categories: normal and impaired. A total of 111 respondents (91.7%) were classified as normal, while the remaining 10 respondents (8.3%) were classified as impaired.

Table 7 Frequency Distribution of MoCA Delayed Memory Results – Ina

MoCA Delay Memory – Ina	Frequency	Percentage (%)
Normal	25	20,7%
Disturbed	96	79,3%

In this subtest, respondents were asked to recall and repeat five previously given words after a period of several minutes. The results were categorized into two categories: normal and impaired. Twenty-five respondents (20.7%) fell into the normal category, while the remaining 96 (79.3%) fell into the impaired category.

Bivariate Analysis Test Results

Table 8 Normality Test Result

	Data Normality Test Kolmogorov-Smirnov
	Sig.
PSQI	<0.001
FDS MoCA	<0.001
MoCA Delayed Memory	<0.001
CERAD	<0.001
CERAD Tunda	<0.001
CERAD Recognition	<0.001

The results of the data normality test indicate that all study variables are not normally distributed, with a P value of <0.001. Since the p value is <0.05, the null hypothesis of normally distributed data is rejected. Therefore, statistical analysis cannot be continued with the Independent T-test, so the Mann-Whitney test is used as an appropriate alternative for non-normally distributed data.

Table 9 Crosstabulation of the CERAD Word List Trial with Sleep Quality

Sleep Quality	CERAD *Word List Trial*		Total	p-*value*
	Disturbed	Normal		
Normal	0	14 (100%)	14 (100%)	0.679
Disturbed	0	107 (100%)	107 (100%)	

Based on the statistical test in Table 4.9, the p-value was 0.679, which is greater than the critical point of $p < 0.05$, thus rejecting H0. This indicates that there is no significant relationship between memory function using the CERAD Word List Trial and sleep quality. Based on the table above, there were more respondents with poor sleep quality and normal CERAD Word List Trial results than respondents with good sleep quality, namely 107 respondents.

Table 10 Cross Tabulation of CERAD Delay with Sleep Quality

Sleep Quality	Delayed CERAD		Total	p-*value*
	Terganggu	Normal		
Normal	2 (14,3%)	12 (85,7)	14 (100%)	0.594
Disturbed	19 (17,8%)	88 (82,2%)	107 (100%)	

Based on the statistical test in Table 4.10, the p-value was 0.594, which is greater than the critical point of $p < 0.05$, thus rejecting H0. This indicates that there is no significant relationship between memory function using the Delayed CERAD test and sleep quality. Based on the table above, respondents with poor sleep quality, with Delayed CERAD results, were more disturbed than respondents with good sleep quality, namely 19 respondents.

Table 11 Crosstabulation of CERAD Recognition with Sleep Quality

Sleep Quality	CERAD Recognition		Total	p-*value*
	Terganggu	Normal		
Normal	0 (0%)	14 (100%)	14 (100%)	0.345
Disturbed	12 (11,2%)	95 (88,8%)	107 (100%)	

Based on the statistical test in Table 4.11, the p-value was 0.345, which is greater than the critical point of $p < 0.05$, thus rejecting H0. This indicates that there is no significant relationship between memory function using the CERAD Recognition test and sleep quality. Based on the table above, there were more respondents with poor sleep quality who had impaired CERAD Recognition results than respondents with good sleep quality, namely 12 respondents.

Table 12 Crosstabulation of Forward Digit Span MoCA – Ina with Sleep Quality

Sleep Quality	FDS MoCA – Ina		Total	p-*value*
	Disturbed	Normal		
Normal	2 (14,3%)	12 (85,7%)	14 (100%)	0.386
Disturbed	8 (7,5%)	99 (92,5%)	107 (100%)	

Based on the statistical test in Table 4.12, the p-value was 0.386, which is greater than the critical point of $p < 0.05$, thus rejecting H0. This indicates that there is no significant relationship between memory function using the MoCA-Ina FDS test and sleep quality. Based on the table above, respondents with poor sleep quality had more impaired MoCA-Ina Forward Digit Span results than respondents with good sleep quality, namely 8 respondents.

Table 13 Crosstabulation of MoCA-Ina Delayed Memory and Sleep Quality

Sleep Quality	MoCA – Ina Delayed Memory		Total	p-*value*
	Terganggu	Normal		
Normal	11 (78,6%)	3 (21,4%)	14 (100%)	0.421
Disturbed	85 (79,4%)	22 (20,6%)	107 (100%)	

Based on the statistical test in table 4.13, a p-value of 0.421 was obtained, which is greater than the critical point of $p < 0.05$, so the decision to Reject H0 was obtained. This indicates that there is no significant relationship between memory function using the MoCA – Ina Delayed Memory test and sleep quality. Based on the table above, it was found that respondents with poor sleep quality with disturbed MoCA – Ina Delayed Memory results were more than respondents with good sleep quality, namely 21 respondents.

Discussion

The contents of the discussion are explained clearly and sharply, reinforced by analysis of the author's arguments based on research findings with theory and previous research results. In the discussion section, it can be seen that there is a connection between the results obtained and the basic concepts and/or hypotheses? The discussions made must be supported by real and clear facts; and Discuss whether there is any conformity or conflict with the results of other people's research.

A study of 121 students from the Faculty of Medicine at Universitas Yarsi showed that 107 respondents (88.4%) reported poor sleep quality, while only 14 respondents (11.4%) reported good sleep quality. This finding aligns with the findings of a study which showed that the majority of medical students at the University of Lampung (75.8%) reported poor sleep quality.[12] Similar findings were also found among medical students at the Faculty of Medicine at Nusa Cendana University, where 87.1% reported poor sleep quality.[13]

Poor sleep quality in medical students is generally caused by high academic workloads, psychological stress, and an unbalanced lifestyle. Medical students often face a busy class schedule, a mountain of assignments, and exams, which can lead to stress and increased cortisol levels.[12] Stress increases the secretion of the hormones epinephrine, norepinephrine, and cortisol. This affects the central nervous system, disrupting a person's normal sleep patterns, including the Non-Rapid Eye Movement (NREM) and Rapid Eye Movement (REM) phases, making individuals more prone to waking up at night or experiencing nightmares.[14]

Long study durations, late-night study habits, and anxiety about academic performance contribute to poor sleep quality. Students are also susceptible to sleep disturbances due to high-intensity study and significant emotional demands, which can negatively impact both physiological and psychological health.[15] This finding is supported by Sadani and Tjandra who stated that busy schedules and academic pressure often lead students to reduce sleep time for studying, further decreasing sleep quality and duration.[16]

Statistical tests found no significant relationship between sleep quality and memory using the CERAD Word List Trial. The CERAD Word List Trial itself is a subtest that measures verbal episodic memory or immediate working memory for verbal information.[17] This study aligns with statement that sleep quality is unrelated to short-term memory as measured using word recall.[18] This finding is supported by research which states that sleep deprivation does not affect short-term verbal memory.[19]

This study showed no significant relationship between sleep quality and memory using the CERAD Delayed Memory test. This is likely due to the characteristics of the respondents, who were in the young adult age range, where cognitive function—including memory—is still at its optimal level and therefore relatively more resistant to sleep disturbances. This finding is supported who stated that in healthy young adults, cognitive performance is generally at its peak, so poor subjective sleep quality does not significantly impact cognitive function.[20] However, this finding contrasts with research whic showed that respondents had better delayed memory after sleep.[21] These findings suggest that sleep facilitates the consolidation of complex declarative memories while reducing memory decline that typically occurs while awake. Statistical tests on the CERAD Memory Recognition Test, which measures verbal recall or verbal episodic memory discrimination, showed no significant association

with sleep quality. This is because the recognition test does not require individuals to actively reproduce stimuli.[22] Several influencing factors include age and education. This is consistent statement that found a significant effect between age and Word List Trial, Recall, and Recognition scores in illiterate older adults. Healthy, illiterate older adults performed lower than those with low cognitive abilities but with higher education.[23] This difference may reflect differences in neural substrates and learning strategies. Furthermore, formal education and reading and writing training enable individuals to develop the intellectual skills necessary for success on cognitive tests.

The Forward Digit Span test found no significant association between memory and sleep quality. This is likely due to other factors that contribute to maintaining memory function, one of which is the reading habit common among medical students. This is in line with research which states that there is a significant interaction.[24]

The relationship between education and reading habits and memory. Reading activity has been shown to influence both episodic and semantic memory, and good semantic memory performance is related to reading frequency. The more frequently a person reads, the greater their vocabulary and general knowledge, which ultimately supports overall memory function.

Furthermore, statistical tests were conducted to determine the relationship between memory, as measured using the MoCA-INA Delayed Memory Assessment, and sleep quality. The results showed no significant relationship between memory and sleep quality. This is in line with research which stated that subjective sleepiness and subjective sleep quality did not significantly affect prospective memory ability.[25] A similar study stated that short-term memory ability showed no significant relationship with sleep quality.[26]

The overall results of memory function parameters in this study indicate no significant relationship between sleep quality and memory function in college students. This is in line with previous research conducted during the COVID-19 pandemic.[27] The results of this study are likely influenced by several factors, including psychological conditions such as stress during the COVID-19 pandemic, which can impair memory and sleep quality through the release of stress hormones, as well as physical and lifestyle factors such as excessive smartphone use and suboptimal nutritional intake. Similar results were also found in a study stated that stress and anxiety can reduce cognitive abilities, including memory.[28]

This research contradicts the findings which stated a relationship between sleep quality and short-term memory.[29] This study stated that during sleep, memory consolidation, storage, and maintenance occur because the cerebral cortex is not burdened with sensory and motor activity, thus strengthening memory associations and integrating information into long-term memory. Sleep deprivation, even for one night, can lead to cognitive impairment, memory decline, and changes in brain chemistry. Furthermore, poor sleep quality can impair memory function because neural activity in the prefrontal and parietal cortex during slow-wave sleep affects the anterior cingulate cortex (ACC), which plays a role in attention regulation. Good attention is necessary for sensory information to be transmitted from the ACC to the entorhinal cortex (EC) in the hippocampus, the center of short-term memory storage. When sleep quality is poor, ACC activation decreases and EC function is impaired, thus weakening short-term memory formation. Memory storage processes, which are normally more efficient during sleep, are also affected by sleep deprivation.[30]

In this study, the authors acknowledge several limitations that require attention. These limitations are important for future researchers to recognize so that future research can be better designed. Measurement of sleep quality in this study relied on the PSQI questionnaire, which was self-reported by respondents. Self-reported data is subjective, so inaccuracies in self-assessments of sleep quality are highly likely. This study was cross-sectional, conducted at only one point in time. This design limits the ability to definitively determine causal relationships. This study also did not analyze confounding

factors such as gender, age, frequency of caffeine consumption, learning patterns, psychological and physiological conditions that may influence sleep quality and memory.

This study found that the majority of Faculty of Medicine students from the 2023–2024 intake had poor sleep quality. This finding contradicts the Qur'an's directive, stating that night is a time for sleep and rest, allowing the body to recover. This is based on the Qur'anic verse An-Naml/27:86, which states:

أَلَمْ يَرَوْا أَنَّا جَعَلْنَا ٱلَّيْلَ لِيَسْكُنُوا۟ فِيهِ وَٱلنَّهَارَ مُبْصِرًا ۚ إِنَّ فِى ذَٰلِكَ لَـَٔايَٰتٍ لِّقَوْمٍ يُؤْمِنُون

"Do they not see that We have made the night for them to rest in it, and the day a light? Indeed, in that are signs for a people who believe."

Tafsir Al-Muyassar explains that those who deny the verses of Allah should realize that Allah made the night a time for rest and sleep, and the day a time for seeing and working to earn a living. This arrangement of night and day is clear evidence for believers of the perfection of Allah's power, oneness, and the immensity of His blessings.[31]

Tafsir as-Sa'di explains that this verse indicates a great sign and a great blessing from Allah, namely the subordination of night and day to humans. The night is made dark so that humans can rest and recuperate, while the day is given light so that they can work and be active. All of this is evidence for believers of the perfection of Allah's oneness and the abundance of His blessings (As-Sa'di, 2016).

It can be concluded from these three interpretations that Allah created the night as a dark time so that humans can rest and sleep to restore their strength, while the day was created bright so that humans can work, be active, and earn a living. This arrangement is clear evidence of Allah's power, grace, and perfection, demonstrating His concern for human needs. All of this is a sign for believers to realize His greatness and live life according to human nature, including maintaining quality sleep as part of the body's recovery.

The results of a memory function test on students from the Faculty of Medicine, Universitas Yarsi, intake 2023–2024, showed that most students had good memory function. After statistical analysis, no significant relationship was found between sleep quality and memory function. These findings differ from Islamic views and modern health literature, which state that sleep plays a crucial role in cognitive processes. In Islamic teachings, sleep is seen as a means of relieving stress, achieving tranquility, and improving memory. The emphasis on the importance of giving the body the right to rest is part of Islamic teachings regarding the balance between worship and physical health. This is based on the following hadith narrated by Imam Bukhari:

سَلَمَةَ بْنُ عَبْدِ الرَّحْمَنِ أَبُو كَثِيرٍ قَالَ حَدَّثَنِي بْنُ أَبِي يَحْيَى الْأَوْزَاعِيُّ قَالَ حَدَّثَنِي عَبْدُ اللَّهِ أَخْبَرَنَا مُحَمَّدُ بْنُ مُقَاتِلٍ أَخْبَرَنَا حَدَّثَنَا عَبْدَ اللَّهِ أَلَمْ أُخْبَرْ أَنَّكَ تَصُومُ النَّهَارَ اللَّهُ عَلَيْهِ وَسَلَّمَ يَا رَسُولُ اللَّهِ صَلَّى قَالَ لِي بْنِ الْعَاصِ رَضِيَ اللَّهُ عَنْهُمَا عَبْدُ اللَّهِ بْنُ عَمْرٍو قَالَ حَدَّثَنِي وَإِنَّ لِزَوْجِكَ عَلَيْكَ حَقًّا وَإِنَّ لِعَيْنِكَ عَلَيْكَ حَقًّا تَفْعَلْ صُمْ وَأَفْطِرْ وَقُمْ وَنَمْ فَإِنَّ لِجَسَدِكَ عَلَيْكَ حَقًّا رَسُولَ اللَّهِ قَالَ فَلَا يَا وَتَقُومُ اللَّيْلَ فَقُلْتُ بَلَى فَإِنَّ ذَلِكَ صِيَامُ الدَّهْرِ كُلِّهِ فَشَدَّدْتُ وَإِنَّ بِحَسْبِكَ أَنْ تَصُومَ كُلَّ شَهْرٍ ثَلَاثَةَ أَيَّامٍ فَإِنَّ لَكَ بِكُلِّ حَسَنَةٍ عَشْرَ أَمْثَالِهَا وَإِنَّ لِزَوْرِكَ عَلَيْكَ حَقًّا كَانَ صِيَامُ نَبِيِّ اللَّهِ دَاوُدَ عَلَيْهِ تَزِدْ عَلَيْهِ قُلْتُ وَمَا وَلَا أَجِدُ قُوَّةً قَالَ فَصُمْ صِيَامَ نَبِيِّ اللَّهِ دَاوُدَ عَلَيْهِ السَّلَام رَسُولَ اللَّهِ إِنِّي فَشُدِّدَ عَلَيَّ قُلْتُ يَا اللَّهُ عَلَيْهِ وَسَلَّم قَبِلْتُ رُخْصَةَ النَّبِيِّ صَلَّى لَيْتَنِي كَبِرَ يَا قَالَ نِصْفَ الدَّهْرِ فَكَانَ عَبْدُ اللَّهِ يَقُولُ بَعْدَ مَا السَّلَام

"Has told us [Muhammad bin Muqatil] has told us ['Abdullah] has told us [Al Awza'iy] said, has told me [Yahya bin Abu Kathir] said, has told me [Abu Salamah bin 'Abdurrahman] said, has told me ['Abdullah bin 'Amru bin Al 'Ash radliallahu 'anhuma] said; Rasulullah shallallahu 'alaihi wasallam said to me: "O 'Abdullah, is it true that you fast all day and then pray all night?" I answered: "That's right, O Messenger of Allah." He said: "Don't do that, but fast and break the fast, pray at night and sleep, because your body has a right over you, your eyes have a right over you, your wife has a right over you and your wife has a right over you. And it is enough for you if you fast for three days in every month because for you every good deed will be rewarded with ten similar good deeds and that means

you have fasted throughout the whole year." So then I asked for more, then He added it. I said: "O Messenger of Allah, I find that I have the ability." So He said: "Fast the fast of Allah's Prophet Daud Alaihissalam and do not add more than that." I asked: "How is that the fasting method of Allah's Prophet Daud Alaihissalam?" He answered: "He Alaihissalam fasted half of the Dahar fast (fasting throughout the year), the method is one day of fasting and one day of not fasting." Later, Abdullah ibn Amr ibn Al-As (may Allah be pleased with him) said, "Wow, if only I had accepted the concession granted by the Prophet (peace and blessings of Allah be upon him)."

This hadith emphasizes that maintaining the body's right to rest is an essential part of maintaining mental clarity and the quality of cognitive function. Accordingly, medical science explains that sleep restores energy, repairs body cells, and optimizes brain function. Lack of sleep increases stress hormones, which can disrupt the hippocampus—the part of the brain responsible for memory formation—thus reducing focus, learning ability, and memory. In chronic conditions, sleep deprivation can even trigger hallucinations, mood disorders, and decreased mental flexibility.[32]

Scholars also emphasize the importance of maintaining a balance between rest, worship, and activity. According to Ibn Qayyim Al-Jauziyyah, sleep nourishes the body and rests the brain, especially the cerebral cortex, which is responsible for higher mental functions such as memory, visualization, and reasoning. Sleep allows the body to remove waste, repair cells, store energy, and strengthen the immune system.[33]

Conclusion

Based on the research results regarding the Effect of Sleep Quality on Memory in College Students, the following conclusions can be drawn: The majority of respondents (107 respondents (88.4%) reported poor sleep quality, while 14 respondents (11.6%) reported good sleep quality. There was no significant relationship between sleep quality and memory function, with a p-value > 0.05. According to Islamic perspective, implementing sleep patterns in accordance with the recommendations of the Prophet Muhammad (peace be upon him) is believed to improve sleep quality and thus enhance one's quality of life.

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