

ORIGINAL ARTICLES

Pattern of Sleep and Sleep-Disturbing Factors Among Adults in UAE

Fahad Abdullah Almahry¹, Khawla Abdullah²,
Abdulrahman Salem³, Thushara Shekhar⁴, Soney M. Varghese⁵

HOW TO CITE THIS ARTICLE:

Fahad Abdullah Almahry, Khawla Abdullah, Abdulrahman Salem, et al. Pattern of Sleep and Sleep-Disturbing Factors Among Adults in UAE. Community Pub Health Nurs. 2025; 10(3): 139-143.

ABSTRACT

Background: It is commonly thought that the amount of sleep has declined during the past few decades along with the transition to modern 24/7 societies. This has provoked claims of an epidemic of sleep deprivation in the general population. Sleep difficulties are regarded as one of the most distressing aspects of an intensive care stay.

Materials and Methods: Quantitative approach with descriptive cross-sectional survey design with convenience sampling was adopted for the study. The Study settings was Among public in UAE and the study duration was 3 weeks. The study instruments were demographic profile with 10 items and to assess the sleep pattern Athen's insomnia assessment scale was used. A check list with 12 items were used to assess sleep disturbing factors.

Results: The data reveals that among participants, 44.0% (n = 91) of respondents reported having no problems with sleep. However, 31.9% (n = 66) experienced mild sleep disturbances. Around 24.2% (n = 50) reported moderate sleep problems. The data shows that many respondents face multifactorial sleep disturbances, with issues like pain (64.3%), breathing difficulty (62.8%), temperature discomfort, and use of sleep medication (63.8%) being especially prominent. Additionally, a significant portion experiences daytime sleepiness, affecting daily functioning and posing safety risks.

Conclusion and Major Findings of the Study: The study concluded that sleep disturbances are common among adults and are influenced by a combination of socio-cultural, occupational, and health factors. Young adults, particularly those in the healthcare sector and smokers, were at higher risk. There is an urgent need to

AUTHOR'S AFFILIATION:

¹Student, College of Nursing, Gulf Medical University, Ajman, United Arab Emirates.

²Student, College of Nursing, Gulf Medical University, Ajman, United Arab Emirates.

³Student, College of Nursing, Gulf Medical University, Ajman, United Arab Emirates.

⁴Lecturer, College of Nursing, Gulf Medical University, Ajman, United Arab Emirates.

⁵Assistant Professor, College of Nursing, Gulf Medical University, Ajman, United Arab Emirates.

CORRESPONDING AUTHOR:

Fahad Abdullah Almahry, Student, College of Nursing, Gulf Medical University, Ajman, United Arab Emirates.

E-mail: 2021ns29@gmail.com

➤ Received: 05-05-2025 ➤ Accepted: 10-07-2025



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Red Flower Publication and Open Access pages (<https://www.rfppl.co.in>)

enhance sleep hygiene awareness, implement early screening for sleep disorders, and promote healthier lifestyle changes. Improving sleep health could lead to better physical and mental health outcomes and enhance the overall quality of life for the population.

KEYWORDS

• Sleep pattern • Sleep disturbing factors • Adults

INTRODUCTION

Sleep is an essential physiological human need that has healing, protecting, and energy-efficient actions to maintain good physical and mental health throughout one's life. Chronic insomnia and disturbance of the natural sleep-wake cycle from the typical 24-hour environmental cycle can lead to several long-term health problems. Sleep difficulties are regarded as one of the most distressing aspects of an intensive care stay. It is commonly thought that the amount of sleep has declined during the past few decades along with the transition to modern 24/7 societies. This has provoked claims of an epidemic of sleep deprivation in the general population.¹

Sleep disorders are a common medical problem and can affect health and quality of life. Sleep is an essential physiological human need that has healing, protecting, and energy-efficient actions to maintain good physical and mental health throughout one's life. Chronic insomnia and disturbance of the natural sleep-wake cycle from the typical 24-hour environmental cycle can lead to several long-term health problems. Sleep difficulties are regarded as one of the most distressing aspects of an intensive care stay.²

Understanding the sleep patterns and sleep-disturbing factors among adults in the United Arab Emirates (UAE) is essential for addressing public health concerns and promoting overall well-being in the population. The UAE, known for its rapid development and diverse population, presents a unique socio-cultural context that may influence sleep behaviors and disturbances among its residents (Rapid urbanization and economic growth in the UAE have led to significant lifestyle changes, including extended working hours and increased use of technology, which can negatively impact sleep quality). Additionally, the diverse cultural backgrounds of the UAE's population can result in varied sleep habits and

disturbances. Identifying and understanding these factors are crucial for developing targeted interventions to improve sleep health and overall quality of life in the UAE.³

Sleep is a fundamental element in the growth and development of adolescents. Sleep undergoes significant changes during adolescence due to physiological and environmental factors. It has been scientifically shown that the required sleep duration in adolescence is more than 8 hours per day. The aim of this study is to understand sleep patterns and sleep-wake cycle of Sharjah adolescents, and identify lifestyle habits affecting those sleep patterns, and to assess the prevalence of sleep problems.⁴

In recent years, sleep-related issues have gained recognition as significant contributors to various health outcomes, including mental health disorders, cardiovascular diseases, and impaired cognitive function. However, research specifically focusing on sleep patterns and disturbances among adults in the UAE remains limited.⁵

Understanding the background of sleep patterns and sleep-disturbing factors in the UAE is crucial for developing targeted interventions and public health strategies to address sleep-related issues effectively. By exploring the intricate interplay between socio-cultural factors, lifestyle changes, and environmental influences on sleep, researchers can inform policies and initiatives aimed at improving sleep hygiene and overall health outcomes in the UAE population. This exploration is paramount for addressing the unique challenges posed by sleep disturbances in a rapidly evolving society like the UAE.⁶

METHODOLOGY

The research adopted a quantitative approach with a descriptive survey design to assess the Pattern of sleep and sleep disturbing

factors. The study was conducted among the general population. The study focused on 205 adults aged 20-60 years attending the OPD. A convenience sampling technique was used, estimating a minimum sample size of 200 after accounting for incomplete responses. Data collection took six months, data was collected using basic demographic data, Athen's insomnia assessment scale & sleep disturbing factors assessment scale. Datacollection commenced following approval from the Institutional Review Board of GMU,with informed consent obtained from all participants. Data were collected via a link and QRcode and analyzed using SPSS with descriptive statistics to assess the degree of knowledge. Ethical considerations included ensuring participants & understanding of the study & purpose, procedures, potential risks, benefits, confidentiality, and their right to withdraw at any time. The research & feasibility was affirmed, with descriptive statistics planned for data analysis. The study aimed to analyze knowledge among adults, exploring their understanding of colorectal cancer risk factors.

RESULTS AND DISCUSSION

Section A: Demographic Characteristics of Adults

Table 1: Frequency & Percentage Distribution of Demographic characteristics of adults (n=205)

Variable	frequency (f)	Percentage (%)
<i>Age</i>		
21-30	175	84.5
31-40	15	7.2
41-50	14	6.8
51-60	3	1.4
<i>Gender</i>		
Male	74	35.7
Female	133	64.3
<i>Marital Status</i>		
Unmarried	162	78.3
Married	33	15.9
Separated	7	3.4
Divorced	5	2.4

Variable	frequency (f)	Percentage (%)
<i>Number of Children</i>		
0	129	62.3
1-3	46	22.2
3-6	20	9.7
More than 6	12	5.8
<i>Age of Children</i>		
0-1	130	62.8
1.1-3	24	11.6
3.1-6	30	14.4
6 and above	23	11.1
<i>Occupation</i>		
Housewife	24	11.6
Medical	122	58.9
Military	12	5.8
Education	29	14.0
Student	20	9.7
<i>Smoking Status</i>		
Current Smoker	165	79.7
Ex-smoker	25	12.1
No smoking	17	8.2

Most of the respondents (84.5%) were aged 21-30 years, indicating a predominantly young adult population. A smaller percentage fell into the 31-40 years (7.2%), 41-50 years (6.8%), and 51-60 years (1.4%) age brackets. Among the participants, 133 (64.3%) were female, and 74 (35.7%) were male. This gender distribution shows a clear female predominance. A large portion of the sample was unmarried (78.3%), while 15.9% were married. Smaller groups included separated (3.4%) and divorced (2.4%) individuals, consistent with the young adult age profile. Most respondents (62.3%) had no children, while 22.2% had 1-3 children. A minority reported having 3-6 (9.7%) or more than 6 children (5.8%). This again reflects a youthful, primarily unmarried group. The largest occupational group was from the medical field (58.9%), followed by those in education (14.0%), housewives (11.6%), students (9.7%), and military personnel (5.8%). This composition suggests the sample likely includes healthcare-associated participants. A high proportion of respondents were current smokers (79.7%). 12.1% were ex-smokers, only

8.2% reported never smoking. This indicates a notable prevalence of smoking behaviour within the sample population.

Section-B: Assessment of the pattern of sleep among the participants

Table 2: Frequency and percentage distribution of Pattern of Sleep Pattern among the participants

Sleep Pattern	f	%
No Problem	91	44.0
Mild	66	31.9
Moderate	50	24.2

The data reveals varying levels of sleep-related issues among participants, 44.0% (n = 91) of respondents reported having no problems with sleep, indicating a healthy sleep pattern in nearly half of the population. However, 31.9% (n = 66) experienced mild sleep disturbances, suggesting occasional issues that may not significantly impair daily functioning. Around 24.2% (n = 50) reported moderate sleep problems, which could reflect more persistent or disruptive sleep issues requiring attention or intervention. This distribution shows that while a considerable number of participants maintain good sleep health, more than half of the group faces some level of sleep disturbance, with a quarter experiencing moderate issues.

Section C: Frequency and Percentage of Sleep

Disturbing Factors

Table 3: Frequency and Percentage of Sleep Disturbing Factors among the participants

Items	Yes		No	
	f	%	f	%
Can't get to sleep within 30 minutes	75	36.2	132	63.8
Wake up in the middle of the night or early morning	67	32.4	140	67.6
Must get up to use the bathroom	78	37.7	129	62.3
Can't breathe comfortably	130	62.8	77	37.2
Feel too cold	100	48.3	107	51.7
Feel too hot	118	57	89	43
Have bad dreams	104	50.2	103	49.8
Have pain	133	64.3	74	35.7
Taken medicine helps you to sleep	132	63.8	75	36.2
Staying awake while driving	68	32.9	139	67.1
Eating meals, or engaging in social activity	63	30.4	144	69.6

The data shows that many respondents face multifactorial sleep disturbances, with issues like pain (64.3%), breathing difficulty (62.8%), temperature discomfort, and use of sleep medication (63.8%) being especially prominent. Additionally, a significant portion experiences daytime sleepiness, affecting daily functioning and posing safety risks.

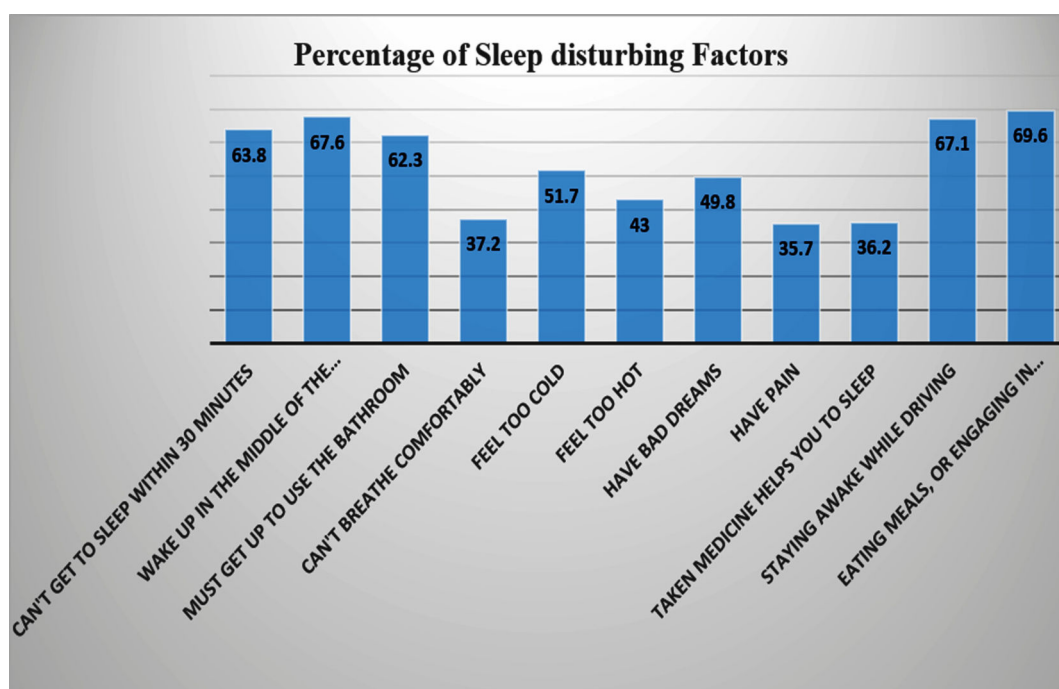


Figure 1: Percentage distribution of sleep disturbing factors

CONCLUSION

The study concludes that sleep disturbances are prevalent among adults in the UAE and are influenced by multiple socio-cultural, occupational, and personal health factors. Most notably, young adults, particularly those in the medical profession and smokers, reported higher levels of sleep disruption. The reliance on medication and the presence of daytime fatigue highlight the urgent need for improved sleep hygiene awareness and interventions. Addressing these disturbances can lead to better overall health outcomes and quality of life.

REFERENCES

1. Youngstedt S.D., Goff E.E., Reynolds AM *et al.* Has adult sleep duration declined over the last 50+ years? *Sleep Med Rev.* 2016; 28: 69-85. [PMC free article] [PubMed] [Google Scholar].
2. Al-Khaled, S., Hammoud, R., Al-Nefaie, M., Alturaiki, M., & Alsubaie, A. (2020). Prevalence and factors associated with poor sleep quality among university students in Saudi Arabia. *International Journal of Environmental Research and Public Health*, 17(15), 5857
3. Al-Hariri, M.T., Al-Maskari, F., & Saadi, H. (2017). Sleep habits and patterns among residents of the UAE. *Journal of Sleep Research*, 26(5), 643-651.
4. Viqar Bashrat, MD* Sarah Ibrahim Summan** *et. al.*, Pattern of Sleep and Evaluation of Sleep Quality and Sleep-Disturbing Factors Among Adults, Vol. 45, No. 2, June 2023. Bahrain Medical Bulletin.
5. The relationship between sleep duration and health status in Qatar's population. Al-Thani MA, Khaled SM. *Public Health Pract (Oxf)* 2020; 1: 100056. - PMC - PubMed
6. Kandeel N.A., Hady M.M., Tantawy N. The Effect of Back Massage on Perceived Sleep Quality among Adult Patients in Intensive Care Units. *Am J Nurs Res* 2019; 7(3): 278-85
7. National center for health statistics. Quick-Stats: percentage of adults who reported an average of ≤ 6 hours of sleep per 24-hour period, by sex and age group—United States, 1985 and 2004. *MMWR Morb Mortal Wkly Rep.* 2005; 54: 933.
8. Statistics Center Abu Dhabi. Statistical yearbook of Abu Dhabi 2020. Abu Dhabi: Statistics Center Abu Dhabi; 2021.
9. Cunningham C., O'Sullivan R., Caserotti P, Tully MA. Consequences of physical inactivity in older adults: A systematic review of reviews and meta-analyses. *Scand J Med Sci Sports* 2020; 30: 816-27.
10. Lawson H.J., Wellens-Mensah J.T., Attah Nantogma S. Evaluation of sleep patterns and self-reported academic performance among medical students at the University of Ghana school of medicine and dentistry. *Sleep Disorders.* 2019; 2019: 8. doi: 10.1155/2019/1278579.1278579 [PMC free article] [PubMed] [CrossRef] [Google Scholar]
11. UAE Digital Media Statistics 2020. 2020 May 25. p. 2021. <https://www.themedialab.me/uae-digital-media-statistics-2020/> Available from: [Google Scholar]
12. Dattani S., Ritchie H., Roser M. Mental Health. don't cry B.B., MAN B. The Power of One. [updated 2021 Aug, cited 2021]. Available from: <https://ourworldindata.org/mental-health#depression>.