

SKRIPSI

**HUBUNGAN KUALITAS TIDUR TERHADAP KEJADIAN MIGRAIN
PADA MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS
MUHAMMADIYAH SURABAYA**



ARDITA DA'IMAH CAHYANI

NIM: 20201880043

**FAKULTAS KEDOKTERAN
UNIVERSITAS MUHAMMADIYAH SURABAYA
SURABAYA**

2024

SKRIPSI

**HUBUNGAN KUALITAS TIDUR TERHADAP KEJADIAN MIGRAIN
PADA MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS
MUHAMMADIYAH SURABAYA**



ARDITA DA'IMAH CAHYANI

NIM: 20201880043

**FAKULTAS KEDOKTERAN
UNIVERSITAS MUHAMMADIYAH SURABAYA
SURABAYA**

2024

**HUBUNGAN KUALITAS TIDUR TERHADAP KEJADIAN MIGRAIN
PADA MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS
MUHAMMADIYAH SURABAYA**

SKRIPSI

Diajukan Kepada Fakultas Kedokteran Universitas Muhammadiyah Surabaya
untuk Memenuhi Kewajiban Persyaratan Kelulusan
Guna Memperoleh Gelar Sarjana Kedokteran

OLEH:

ARDITA DA'IMAH CAHYANI

NIM: 20201880043

**FAKULTAS KEDOKTERAN
UNIVERSITAS MUHAMMADIYAH SURABAYA
SURABAYA**

2024

PERNYATAAN TIDAK MELAKUKAN PLAGIASI

Saya yang bertanda tangan di bawah ini:

Nama : Ardita Da'imah Cahyani

NIM : 20201880043

Fakultas : Kedokteran

Program Studi : S1 Pendidikan Dokter

Menyatakan bahwa Tugas Akhir dengan judul **“HUBUNGAN KUALITAS TIDUR TERHADAP KEJADIAN MIGRAIN PADA MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS MUHAMMADIYAH SURABAYA”** yang saya tulis ini benar-benar tulisan karya sendiri bukan hasil plagiasi, baik sebagian atau keseluruhan. Bila di kemudian hari terbukti hasil plagiasi, maka saya bersedia menerima sanksi akademik sesuai dengan ketentuan yang berlaku di Universitas Muhammadiyah Surabaya.

Surabaya, 29 November 2023

Yang membuat pernyataan,



ARDITA DA'IMAH CAHYANI

NIM 20201880043

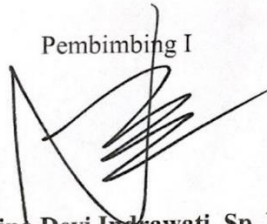
PERSETUJUAN PEMBIMBING

Skripsi dengan judul “**HUBUNGAN KUALITAS TIDUR TERHADAP KEJADIAN MIGRAIN PADA MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS MUHAMMADIYAH SURABAYA**” yang diajukan oleh mahasiswa atas nama **ARDITA DA’IMAH CAHYANI (NIM 20201880043)**, telah diperiksa dan disetujui isi serta susunannya, sehingga diajukan dalam ujian sidang tugas akhir pada program S1 Pendidikan Dokter Fakultas Kedokteran Universitas Muhammadiyah Surabaya.

Surabaya, 29 November 2023

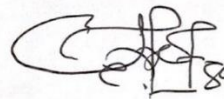
Menyetujui,

Pembimbing I



dr. Nina Devi Indrawati, Sp. N.

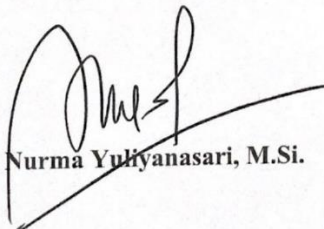
Pembimbing II



dr. Era Catur Prasetya, Sp. KJ.

Mengetahui,

Ketua Program Studi S1 Pendidikan Dokter



dr. Nurma Yuliyanasari, M.Si.

PENGESAHAN PENGUJI

Skripsi dengan judul “**HUBUNGAN KUALITAS TIDUR TERHADAP KEJADIAN MIGRAIN PADA MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS MUHAMMADIYAH SURABAYA**” telah berhasil dipertahankan di hadapan Tim Penguji pada tanggal 27 Desember 2023 oleh mahasiswa atas nama **ARDITA DA’IMAH CAHYANI (NIM 20201880043)**, Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Muhammadiyah Surabaya.

TIM PENGUJI

Penguji Ketiga : dr. Kartika Prahasanti, M.Si.
Pembimbing I : dr. Nina Devi Indrawati, Sp.N.
Pembimbing II : dr. Era Catur Prasetya, Sp.KJ.

(.....)
(.....)
(.....)

Mengesahkan,

Dekan Fakultas Kedokteran



dr. H. M. Jusuf Wibisono, Sp.P (K), FCCP, FISR

UCAPAN TERIMA KASIH

Puji syukur kehadiran Allah SWT atas berkat, rahmat, taufik, dan hidayah-Nya sehingga penyusunan skripsi yang berjudul **“Hubungan Kualitas Tidur terhadap Kejadian Migrain pada Mahasiswa Fakultas Kedokteran Universitas Muhammadiyah Surabaya”** ini dapat terselesaikan dengan baik.

Penulis menyadari bahwa dalam tiap proses penulisan skripsi ini banyak mengalami kesulitan dan hambatan, namun berkat bantuan dan bimbingan dari berbagai pihak maka penelitian ini dapat terselesaikan. Maka dari itu penulis ingin mengucapkan terima kasih kepada:

1. Dr. dr. Sukadiono, M.M. Selaku Rektor Universitas Muhammadiyah Surabaya.
2. dr. H. M. Jusuf Wibisono, Sp.P (K), FCCP, FISR. Selaku Dekan Fakultas Kedokteran Universitas Muhammadiyah Surabaya.
3. dr. Nina Devi Indrawati, Sp.N. Selaku dosen pembimbing I penulis yang telah banyak membantu dan memberikan masukan penulis dalam penyelesaian skripsi ini.
4. dr. Era Catur Prasetya, Sp.KJ. Selaku dosen pembimbing II penulis yang telah banyak membantu dan memberikan masukan penulis dalam penyelesaian skripsi ini.
5. dr. Kartika Prahasanti, M.Si. Selaku penguji III yang telah memberikan dukungan dan masukan dalam melakukan penelitian.
6. Seluruh dosen serta *staff* Fakultas Kedokteran Universitas Muhammadiyah Surabaya yang telah membantu penulis dalam urusan administrasi dan alur penelitian sehingga penulis dapat menyelesaikan skripsi ini.
7. Ayah, Mama, dan Kakak, yang senantiasa memberikan dukungan, motivasi, dan doa sehingga penulis dapat menyelesaikan skripsi ini tepat waktu.

8. Nasya Septa K, Darin Rehadatul A, Siti Nurhidayah, Tiffany Lovenlya, Anindya Vibianti, Hagea Sophia, Salsabila Rayhani, Iffah Nabila, Selma Karomy, M. Ariq Rahman, Aditya Putra Wibowo, Rony Hidayat, Hapsari Fitri, Reza Rajwa Sabita, Feelinda Nur Azizah, Nanda Faradiza. Selaku teman sejawat penulis yang kebersamainya dalam pengerjaan skripsi dan memberikan banyak arahan sehingga dalam pengerjaannya penulis dapat menyelesaikan skripsi dengan banyak bantuan dari sekitar.
9. Annisa Dewi Maharani. Selaku kakak tingkat yang tak segan mengulurkan bantuan dan arahan sehingga penulis dapat menyelesaikan skripsi dengan baik.
10. Irawan. Selaku teman perjalanan penulis yang senantiasa kebersamainya penulis dalam segala musim dan cuaca, dalam keceriaan dan keterpurukan.
11. Seluruh pihak yang tidak bisa penulis sebut satu-persatu namanya, yang berjasa dalam hal kecil – besar dan memberikan banyak sekali arti serta bantuan dalam proses pengerjaan skripsi.
12. Diri sendiri. Karena telah berusaha untuk bertahan hingga sejauh ini meskipun dalam perjalanan yang dilalui banyak hal yang dirasa tidak mudah.

Penulis menyadari bahwa dalam penyusunan penulisan naskah skripsi ini masih jauh dari kata sempurna dan tak luput cela, oleh karena itu penulis mengharapkan segala masukan berupa saran dan kritik yang membangun demi kesempurnaan skripsi penulis.

Akhir kata, penulis berharap semoga skripsi yang dirampungkan ini dapat bermanfaat bagi berbagai pihak yang terkait.

Surabaya, 27 Desember 2023

Penulis

DAFTAR ISI

	Halaman
Sampul Depan	i
Halaman Prasyarat	ii
Pernyataan Mahasiswa	iii
Halaman Persetujuan Pembimbing	iv
Halaman Pengesahan Penguji	iv
Ucapan Terima Kasih.....	vi
Daftar Isi.....	viii
Daftar Tabel	x
Daftar Gambar.....	xi
Daftar Lampiran	xii
Daftar Singkatan dan Istilah.....	xiii
Abstrak	xiv
<i>Abstract</i>	xv
BAB 1 PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah	4
1.3 Tujuan	4
1.3.1 Tujuan umum	4
1.3.2 Tujuan khusus	4
1.4 Manfaat	5
1.4.1 Manfaat teoritis	5
1.4.2 Manfaat praktis.....	5
BAB 2 TINJAUAN PUSTAKA	7
2.1 Kualitas Tidur.....	7
2.1.1 Definisi tidur	7
2.1.2 Definisi Kualitas Tidur.....	7
2.1.3 Epidemiologi Kualitas Tidur.....	7
2.1.4 Faktor yang Mempengaruhi Kualitas Tidur.....	8
2.1.5 Fisiologi Tidur (Siklus Tidur Manusia)	8
2.1.6 PSQI (<i>Pittsburgh Sleep Quality Index</i>)	11
2.2 Migrain.....	12
2.2.1 Klasifikasi Nyeri Kepala	12
2.2.2 Definisi dan Epidemiologi Migrain.....	12
2.2.3 Patofisiologi Migrain.....	13
2.2.4 Faktor Risiko Migrain	18
2.2.5 MSQ (<i>Migraine Screening Questionnaire</i>).....	19
2.3 Hubungan Kualitas Tidur terhadap Kejadian Migrain.....	19
BAB 3 KERANGKA KONSEPTUAL	22
3.1 Kerangka Konseptual	22

3.2 Penjelasan Kerangka Konseptual	23
3.3 Hipotesis Penelitian.....	24
BAB 4 METODE PENELITIAN	26
4.1 Jenis dan Rancangan Penelitian	26
4.2 Populasi, Sampel, Besar Sampel, dan Teknik Pengambilan Sampel..	26
4.2.1 Populasi	26
4.2.2 Sampel.....	26
4.2.3 Besar Sampel.....	27
4.2.4 Teknik Pengambilan Sampel.....	28
4.3 Variabel Penelitian dan Definisi Operasional Variabel	29
4.3.1 Variabel penelitian	29
4.3.2 Definisi operasional variabel.....	29
4.4 Instrumen Penelitian.....	29
4.5 Lokasi dan Waktu Penelitian	30
4.6 Prosedur Pengambilan dan Pengumpulan Data	31
4.6.1 Bagan alur penelitian.....	32
4.7 Cara Analisis Data.....	33
4.7.1 Pengolahan Data.....	33
4.7.2 Analisis Data	33
BAB 5 HASIL PENELITIAN	35
5.1 Gambaran Umum Penelitian	35
5.2 Gambaran Karakteristik Responden Penelitian	35
5.3 Kualitas Tidur.....	38
5.4 Migrain.....	40
5.5 Hubungan antara Kualitas Tidur terhadap Kejadian Migrain	42
BAB 6 PEMBAHASAN	45
6.1 Kualitas Tidur.....	45
6.1.1 Faktor yang mempengaruhi kualitas tidur.....	46
6.1.2 Karakteristik responden kualitas tidur.....	50
6.2 Kejadian Migrain	53
6.2.1 Karakteristik Responden Migrain	54
6.3 Hubungan Kualitas Tidur terhadap Kejadian Migrain.....	59
6.4 Keterbatasan Penelitian.....	63
BAB 7 KESIMPULAN DAN SARAN	65
7.1 Kesimpulan	65
7.2 Saran.....	65
DAFTAR PUSTAKA	68
LAMPIRAN	81

DAFTAR TABEL

Tabel 4. 1 Definisi Operasional Variabel	30
Tabel 4. 2 <i>Timeline</i> Penelitian	31
Tabel 5. 1 Gambaran Karakteristik Responden.....	36
Tabel 5. 2 Faktor yang Mempengaruhi Kualitas Tidur	37
Tabel 5. 3 Frekuensi Kualitas Tidur	38
Tabel 5. 4 <i>Crosstab</i> Karakteristik terhadap Kualitas Tidur	39
Tabel 5. 5 Frekuensi Kejadian Migrain.....	40
Tabel 5. 6 <i>Crosstab</i> Karakteristik terhadap Kejadian Migrain.....	41
Tabel 5. 7 Uji <i>Chi Square</i>	43

DAFTAR GAMBAR

Gambar 2. 1 Siklus Tidur Manusia.....	9
Gambar 3. 1 Kerangka Konseptual.....	22
Gambar 4. 1 Bagan Alur Penelitian.....	32

DAFTAR LAMPIRAN

Lampiran 1 <i>Ethical Clearance</i>	60
Lampiran 2 Persyaratan Persetujuan Publikasi	61
Lampiran 3 Surat Izin Penelitian.....	62
Lampiran 4 Surat Pemberian Izin.....	63
Lampiran 5 <i>Informed Consent</i>	64
Lampiran 6 Kuesioner	65
Lampiran 7 Dokumentasi	69
Lampiran 8 Hasil Jawaban Responden	70
Lampiran 9 Hasil Analisis Statistik.....	96
Lampiran 10 Kartu Bimbingan <i>Cyber</i>	103

DAFTAR SINGKATAN DAN ISTILAH

ACTH	: <i>Adrenocorticotrophic</i>
AIS	: <i>Athens Insomnia Scale</i>
CGRP	: <i>Calcitonin Gene-Related Peptide</i>
CNS	: <i>Central Nervous System</i>
CRSD	: <i>Circadian Rhythm Sleep-Wake Disorder</i>
CSA	: <i>Central Sleep Apnea</i>
CSD	: <i>Cortical Spreading Depression</i>
DHPG	: <i>Dihydroxyphenylglycine</i>
DOPAC	: <i>3,4-Dihydroxyphenylacetic Acid</i>
ESS	: <i>Epworth Sleepiness Scale</i>
ICHD-3	: <i>The International Classification of Headache Disorders-3</i>
ICSD-3	: <i>International Classification of Sleep Disorders-3</i>
IH	: <i>Idiopatik Hypersomnia</i>
ISI	: <i>Insomnia Severity Index</i>
JSS	: <i>Jenkins Sleep Scale</i>
LAMF	: <i>Low Amplitude Mixed-Frequency</i>
LSEQ	: <i>Leeds Sleep Evaluation Questionnaire</i>
MSQ	: <i>Mini-Sleep Questionnaire</i>
NREM	: <i>Non-Rapid Eye Movement</i>
OSA	: <i>Obstructive Sleep Apnea</i>
PACAP	: <i>Pituitary Adenylate Cyclase-Activating Polypeptide</i>
PSQI	: <i>Pittsburgh Sleep Quality Index</i>
RBD	: <i>REM Sleep Behavior Disorder</i>
REM	: <i>Rapid Eye Movement</i>
RLS	: <i>Restless Legs Syndrome</i>
SDB	: <i>Sleep-Disordered Breathing</i>
SPSS	: <i>Statistical Package for the Social Science</i>
SWS	: <i>Slow-Wave Sleep</i>
TAC	: <i>Trigeminal Autonomic Cephalgia</i>
TNC	: <i>Trigeminal Nucleus Caudalis</i>
TTH	: <i>Tension Type Headache</i>
UFC	: <i>Urinary Free Cortisol</i>

DAFTAR PUSTAKA

- Abdulhadi, A., Alharbi, H., Alharbi, S. H., Mansour, A., Albalawi, A., Ali, M., Nasser, M., Alsiraa, N., & Alkhrisi, M. H. (2018). Migraine among Medical and Non-Medical Students of Hail University. *The Egyptian Journal of Hospital Medicine*, 71(April), 3343–3350.
- Adnyana, I. M. O. (2020). Prevalence of headache among medical students in Universitas Udayana, Denpasar, Bali-Indonesia. *Indonesia Journal of Biomedical Science*, 14(1), 26. <https://doi.org/10.15562/ijbs.v14i1.241>
- Aguilar-Shea, A. L., & Diaz-de-Teran, J. (2022). Migraine review for general practice. *Atencion Primaria*, 54(2). <https://doi.org/10.1016/J.APRIM.2021.102208>
- Agwa, R. H., Alharthi, Z., Alzahrani, A. T., Alghamdi, M. A., Alzahrani, R. A., Alghamdi, A. A., Alghamdi, R. H., Alghamdi, S. R., & Alghamdi, A. A. (2023). The Prevalence of Irritable Bowel Syndrome and Its Co-existence With Migraine in Medical and Non-medical Students at Al-Baha University, Saudi Arabia. *Cureus*, 15(8). <https://doi.org/10.7759/CUREUS.44077>
- Al-Khani, A. M., Sarhandi, M. I., Zaghoul, M. S., Ewid, M., & Saquib, N. (2019). A cross-sectional survey on sleep quality, mental health, and academic performance among medical students in Saudi Arabia. *BMC Research Notes*, 12(1). <https://doi.org/10.1186/S13104-019-4713-2>
- Aladdin, Y. S., Alsharif, R., Mattar, W., Alturki, M., Malli, I. A., Alghamdi, Y., Ismail, A., & Shirah, B. (2022). Migraine Prevalence and Analysis of Dietary Habits in Relation to Headache in the Female Population: A Single-Center Study From Jeddah, Saudi Arabia. *Cureus*, 14(5). <https://doi.org/10.7759/CUREUS.24848>
- Alfi, W. N., & Yuliwar, R. (2018). The Relationship between Sleep Quality and Blood Pressure in Patients with Hypertension. *Jurnal Berkala Epidemiologi*, 6(1), 18. <https://doi.org/10.20473/jbe.v6i12018.18-26>
- Alkarrash, M. S., Shashaa, M. N., Kitaz, M. N., Rhayim, R., Alhasan, M. M., Alassadi, M., Aldakhil, A., Alkhamis, M., Ajam, M., Douba, M., Banjah, B., Ismail, A., Zazo, A., Zazo, R., Abdulwahab, M., Alkhamis, A., Arab, A., Alameen, M. H., & Farfouti, M. T. (2021). Migraine and tension-type headache among undergraduate medical, dental and pharmaceutical students of University of Aleppo: a cross-sectional study. *BMJ Neurology Open*, 3(2), 1–10. <https://doi.org/10.1136/bmjno-2021-000211>
- Alotaibi, A., Alosaimi, F., Alajlan, A., & Bin Abdulrahman, K. (2020). The relationship between sleep quality, stress, and academic performance among medical students. *Journal of Family & Community Medicine*, 27(1), 23. <https://doi.org/10.4103/jfcm.2020.24848>

[//doi.org/10.4103/JFCM.JFCM_132_19](https://doi.org/10.4103/JFCM.JFCM_132_19)

- Anaya, F., Abu Alia, W., Hamoudeh, F., Nazzal, Z., & Maraqa, B. (2022). Epidemiological and clinical characteristics of headache among medical students in Palestine: a cross sectional study. *BMC Neurology*, 22(1). <https://doi.org/10.1186/S12883-021-02526-9>
- Andreou, A. P., & Edvinsson, L. (2019). Mechanisms of migraine as a chronic evolutive condition. *The Journal of Headache and Pain*, 20(1). <https://doi.org/10.1186/S10194-019-1066-0>
- Anindiba, I. F., Widiastuti, N., Purwanti, R., & Dieny, F. F. (2022). Hubungan Durasi Tidur, Kualitas Tidur, Faktor Stress, dan Night Eating Syndrome dengan Preferensi Makanan pada Mahasiswa Universitas Diponegoro. *Media Kesehatan Masyarakat Indonesia*, 21(1), 53–62. <https://doi.org/10.14710/mkmi.21.1.53-62>
- Aninditha, T., & Rasyid, A. (2017). Nyeri kepala. In *Buku Ajar Neurologi Buku 2* (Vol. 216).
- Antony, J. W., Schönauer, M., Staresina, B. P., & Cairney, S. A. (2019). Sleep Spindles and Memory Reprocessing. *Trends in Neurosciences*, 42(1), 1–3. <https://doi.org/10.1016/J.TINS.2018.09.012>
- Ardiani, N. K. N., & Subrata, I. M. (2021). FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN KUALITAS TIDUR MAHASISWA YANG MENGONSUMSI KOPI DI FAKULTAS KEDOKTERAN UNIVERSITAS UDAYANA. *Arc. Com. Health*, 8(2), 372–387. <https://doi.org/p-ISSN 2302-139X e-ISSN 2527-3620>
- Arendt-Nielsen, L., Morlion, B., Perrot, S., Dahan, A., Dickenson, A., Kress, H. G., Wells, C., Bouhassira, D., & Mohr Drewes, A. (2018). Assessment and manifestation of central sensitisation across different chronic pain conditions. *European Journal of Pain (London, England)*, 22(2), 216–241. <https://doi.org/10.1002/EJP.1140>
- B, Y. D., Iriawan, J., & Nur, A. C. (2018). *Prevalence and Trigger Factors of Primary Headache Among Medical Students in Jenderal Achmad Yani University Batch 2018 During* (Vol. 1, Issue 1). Atlantis Press International BV. <https://doi.org/10.2991/978-94-6463-060-2>
- Bailey, M. A., & Holscher, H. D. (2018). Microbiome-Mediated Effects of the Mediterranean Diet on Inflammation. *Advances in Nutrition (Bethesda, Md.)*, 9(3), 93–206. <https://doi.org/10.1093/ADVANCES/NMY013>
- Bhattacharai, A. M., Gurung, S., Pathak, B. D., Karki, S., Adhikari, A., Tandon, O. P., Poudel, S., Yadav, D., Pant, C., & Dhakal, B. (2022). Prevalence and clinical characteristics of headache among medical students of Nepal: A cross-

- sectional study. *PLoS ONE*, *17*(11 November), 1–10. <https://doi.org/10.1371/journal.pone.0277821>
- Burch, R. C., Buse, D. C., & Lipton, R. B. (2019). Migraine: Epidemiology, Burden, and Comorbidity. *Neurologic Clinics*, *37*(4), 631–649. <https://doi.org/10.1016/J.NCL.2019.06.001>
- Burch, R., Rizzoli, P., & Loder, E. (2018). The Prevalence and Impact of Migraine and Severe Headache in the United States: Figures and Trends From Government Health Studies. *Headache: The Journal of Head and Face Pain*, *58*(4), 496–505. <https://doi.org/10.1111/HEAD.13281>
- Caesarridha, D. K. (2021). Hubungan kualitas tidur dengan konsentrasi belajar pada mahasiswa kedokteran. *Jurnal Medika Utama*, *2*(4), 1213–1217. <http://journal.stainkudus.ac.id/index.php/equilibrium/article/view/1268/1127>
- Cates, M. E., Clark, A., Woolley, T. W., & Saunders, A. (2015). Sleep Quality Among Pharmacy Students. *American Journal of Pharmaceutical Education*, *79*(1), 1–6. <https://doi.org/10.5688/AJPE79109>
- Chahine, S., Wanna, S., & Salameh, P. (2022). Migraine attacks among Lebanese university medical students: A cross sectional study on prevalence and correlations. *Journal of Clinical Neuroscience: Official Journal of the Neurosurgical Society of Australasia*, *100*, 1–6. <https://doi.org/10.1016/J.JOCN.2022.03.039>
- Choudry, H., Ata, F., Alam, M. N. N., Ruqaiya, R., Suheb, M. K., Ikram, M. Q., Choudhry, M. M., & Muaz, M. (2022). Migraine in physicians and final year medical students: A cross-sectional insight into prevalence, self-awareness, and knowledge from Pakistan. *World Journal of Methodology*, *12*(5), 414. <https://doi.org/10.5662/WJM.V12.I5.414>
- Delic, D., Ristic, A., Grujic, B., Djakovic, M., Lasic, A., Hadzic, E., Abadzic, A., Hajduk, D., Keric, S. P., Bajramovic, R., Ganic, S., Ibrahimovic, A., Solbic, Z., Jasic, J., Blagojevic, D., Sopta, E., Hodzic, H., & Jankovic, S. M. (2018). Translation and Transcultural Validation of Migraine Screening Questionnaire (MS-Q). *Medical Archives*, *72*(6), 430. <https://doi.org/10.5455/MEDARH.2018.72.430-433>
- Della Monica, C., Johnsen, S., Atzori, G., Groeger, J. A., & Dijk, D. J. (2018). Rapid eye movement sleep, sleep continuity and slow wave sleep as predictors of cognition, mood, and subjective sleep quality in healthy men and women, aged 20-84 years. *Frontiers in Psychiatry*, *9*. <https://doi.org/10.3389/FPSYT.2018.00255/FULL>
- Desouky, D. E., Zaid, H. A., & Taha, A. A. (2019). Migraine, tension-type headache, and depression among Saudi female students in Taif University. *The Journal of the Egyptian Public Health Association*, *94*(1), 1–9.

<https://doi.org/10.1186/S42506-019-0008-7>

- Desouky, D., Zaid, H., & Taha, A. (2019). Depression among Saudi female students in Taif University. *Journal of the Egyptian Public Health Association*, 7(1), 1–9.
- Dodick, D. W. (2018). A Phase-by-Phase Review of Migraine Pathophysiology. *Headache*, 58, 4–16. <https://doi.org/10.1111/head.13300>
- Farizy, D. F., & Graharti, R. (2021). Hubungan Kualitas Tidur dengan Kejadian Migrain pada Mahasiswa Fakultas kedokteran Universitas Lampung Relationship of Sleep Quality with Migraine Incidence in Medical Faculty Students , University of Lampung. *Medula*, 11(1), 174–179.
- Feng, H., Wen, S. Y., Qiao, Q. C., Pang, Y. J., Wang, S. Y., Li, H. Y., Cai, J., Zhang, K. X., Chen, J., Hu, Z. A., Luo, F. L., Wang, G. Z., Yang, N., & Zhang, J. (2020). Orexin signaling modulates synchronized excitation in the sublateralodorsal tegmental nucleus to stabilize REM sleep. *Nature Communications*, 11(1). <https://doi.org/10.1038/S41467-020-17401-3>
- Ferri, R., Rundo, F., Silvani, A., Zucconi, M., Bruni, O., Ferini-Strambi, L., Plazzi, G., & Manconi, M. (2017). REM Sleep EEG Instability in REM Sleep Behavior Disorder and Clonazepam Effects. *Sleep*, 40(8). <https://doi.org/10.1093/SLEEP/ZSX080>
- Foti, M., Lo Buono, V., Corallo, F., Palmeri, R., Bramanti, P., & Marino, S. (2017). Neuropsychological assessment in migraine patients: a descriptive review on cognitive implications. *Neurological Sciences : Official Journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology*, 38(4), 553–562. <https://doi.org/10.1007/S10072-017-2814-Z>
- Gandhi, M. H., & Emmady, P. D. (2022). Physiology, K Complex. *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK557469/>
- Gazerani, P., & Cairns, B. E. (2017). Dysautonomia in the pathogenesis of migraine. <https://doi.org/10.1080/14737175.2018.1414601>, 18(2), 153–165. <https://doi.org/10.1080/14737175.2018.1414601>
- Gil-Gouveia, R., & Martins, I. P. (2018). Clinical description of attack-related cognitive symptoms in migraine: A systematic review. *Cephalalgia: An International Journal of Headache*, 38(7), 1335–1350. <https://doi.org/10.1177/0333102417728250>
- Goadsby, P. J., & Holland, P. R. (2019). An Update: Pathophysiology of Migraine. *Neurologic Clinics*, 37(4), 651–671. <https://doi.org/10.1016/j.ncl.2019.07.008>
- Goadsby, P. J., Holland, P. R., Martins-Oliveira, M., Hoffmann, J., Schankin, C., & Akerman, S. (2017a). Pathophysiology of migraine: A disorder of sensory processing. *Physiological Reviews*, 97(2), 553–622.

<https://doi.org/10.1152/PHYSREV.00034.2015/ASSET/IMAGES/LARGE/Z9J0011727950009.JPEG>

- Goadsby, P. J., Holland, P. R., Martins-Oliveira, M., Hoffmann, J., Schankin, C., & Akerman, S. (2017b). Pathophysiology of Migraine: A Disorder of Sensory Processing. *Physiological Reviews*, *97*(2), 553. <https://doi.org/10.1152/PHYSREV.00034.2015>
- Gohil, A., & Hannon, T. S. (2018). Poor Sleep and Obesity: Concurrent Epidemics in Adolescent Youth. *Frontiers in Endocrinology*, *9*(JUL). <https://doi.org/10.3389/FENDO.2018.00364>
- Gu, X., & Xie, Y. J. (2018a). Migraine attacks among medical students in Soochow University, Southeast China: a cross-sectional study. *Journal of Pain Research*, *11*, 771. <https://doi.org/10.2147/JPR.S156227>
- Gu, X., & Xie, Y. J. (2018b). Migraine attacks among medical students in Soochow University, Southeast China: a cross-sectional study. *Journal of Pain Research*, *11*, 771. <https://doi.org/10.2147/JPR.S156227>
- HABEL, P. R. G., SILALAH, P. Y., & TAIHUTTU, Y. (2019). Hubungan Kualitas Tidur dengan Nyeri Kepala Primer pada Masyarakat Daerah Pesisir Desa Nusalaut, Ambon. *Smart Medical Journal*, *1*(2), 47. <https://doi.org/10.13057/smj.v1i2.28698>
- Haryati, Yunaningsi, S. P., & Junuda. (2020). FAKTOR YANG MEMPENGARUHI KUALITAS TIDUR MAHASISWA FAKULTAS KEDOKTERAN UNIVERSITAS HALU OLEO. *Jurnal Surya Medika*, *32*(2), 58–65.
- Hershner, S., & O'Brien, L. M. (2018). The Impact of a Randomized Sleep Education Intervention for College Students. *Journal of Clinical Sleep Medicine : JCSM: Official Publication of the American Academy of Sleep Medicine*, *14*(3), 337–347. <https://doi.org/10.5664/JCSM.6974>
- Hilditch, C. J., & McHill, A. W. (2019). Sleep inertia: current insights. *Nature and Science of Sleep*, *11*, 155. <https://doi.org/10.2147/NSS.S188911>
- Holland, P. R., Barloese, M., & Fahrenkrug, J. (2018). PACAP in hypothalamic regulation of sleep and circadian rhythm: importance for headache. *Journal of Headache and Pain*, *19*(1). <https://doi.org/10.1186/s10194-018-0844-4>
- Inonu, V. F. (2020). Peran Hormon Estrogen Pada Siklus Menstruasi Sebagai Faktor Pemicu Terjadinya Migrain The Role of Estrogen Hormone In Menstrual Cycle As A Trigger Factor For Migraine. *Medula*, *10*(2), 302–306.
- Iyengar, S., Ossipov, M. H., & Johnson, K. W. (2017). The role of calcitonin gene-related peptide in peripheral and central pain mechanisms including migraine. *Pain*, *158*(4), 543. <https://doi.org/10.1097/J.PAIN.0000000000000831>

- Jia, X., Huang, Y., Yu, W., Ming, W. K., Qi, F., & Wu, Y. (2022). A Moderated Mediation Model of the Relationship between Family Dynamics and Sleep Quality in College Students: The Role of Big Five Personality and Only-Child Status. *International Journal of Environmental Research and Public Health*, *19*(6). <https://doi.org/10.3390/IJERPH19063576>
- Khan, J., Asoom, L. I. Al, Sunni, A. Al, Rafique, N., Latif, R., Saif, S. Al, Almandil, N. B., Almohazey, D., AbdulAzeez, S., & Borgio, J. F. (2021). Genetics, pathophysiology, diagnosis, treatment, management, and prevention of migraine. *Biomedicine and Pharmacotherapy*, *139*, 111557. <https://doi.org/10.1016/j.biopha.2021.111557>
- Kharimah, A., Khairunnisa, C., & Zara, N. (2022). Gambaran Kualitas Tidur pada Penderita Migrain di Poli Saraf RSUD Cut Meutia. *GALENICAL : Jurnal Kedokteran Dan Kesehatan Mahasiswa Malikussaleh*, *1*(4), 51. <https://doi.org/10.29103/jkkmm.v1i4.8908>
- Krause, A. J., Prather, A. A., Wager, T. D., Lindquist, M. A., & Walker, M. P. (2019). The Pain of Sleep Loss: A Brain Characterization in Humans. *The Journal of Neuroscience*, *39*(12), 2291. <https://doi.org/10.1523/JNEUROSCI.2408-18.2018>
- Li, Y., Bai, W., Zhu, B., Duan, R., Yu, X., Xu, W., Wang, M., Hua, W., Yu, W., Li, W., & Kou, C. (2020). Prevalence and correlates of poor sleep quality among college students: a cross-sectional survey. *Health and Quality of Life Outcomes*, *18*(1). <https://doi.org/10.1186/S12955-020-01465-2>
- Lindquist, B. E., & Shuttleworth, C. W. (2017). Evidence that adenosine contributes to Leao's spreading depression in vivo. *Journal of Cerebral Blood Flow & Metabolism*, *37*(5), 1656. <https://doi.org/10.1177/0271678X16650696>
- MacGregor, E. A. (2017). Migraine. *Annals of Internal Medicine*, *166*(7), ITC49–ITC64. <https://doi.org/10.7326/AITC201704040>
- Maheshwari, G., & Shaukat, F. (2019). Impact of Poor Sleep Quality on the Academic Performance of Medical Students. *Cureus*, *11*(4). <https://doi.org/10.7759/CUREUS.4357>
- Malik, J., Lo, Y. L., & Wu, H. T. (2018). Sleep-wake classification via quantifying heart rate variability by convolutional neural network. *Physiological Measurement*, *39*(8), 085004. <https://doi.org/10.1088/1361-6579/AAD5A9>
- Malik, M. (2017). Correlation of Stress with Migraine - A Review. *International Journal of Current Research and Review*, June. <https://doi.org/10.7324/ijcrr.2017.9125>
- Manita, E., Mawarpury, M., Khairani, M., & Sari, K. (2019). Hubungan Stres dan Kesejahteraan (Well-being) dengan Moderasi Kebersyukuran. *Gadjah Mada*

- Journal of Psychology (GamaJoP)*, 5(2), 178.
<https://doi.org/10.22146/gamajop.50121>
- Manzar, M. D., Hameed, U. A., Salahuddin, M., Khan, M. Y. A., Nureye, D., Wakene, W., Alamri, M., Albougami, A., Pandiperumal, S. R., & Bahammam, A. S. (2020). Migraine screen questionnaire: Further psychometric evidence from categorical data methods. *Health and Quality of Life Outcomes*, 18(1), 1–9. <https://doi.org/10.1186/S12955-020-01361-9/TABLES/6>
- Medic, G., Wille, M., & Hemels, M. E. H. (2017). Short- and long-term health consequences of sleep disruption. *Nature and Science of Sleep*, 9, 151. <https://doi.org/10.2147/NSS.S134864>
- Mohammadbeigi, A., Absari, R., Valizadeh, F., Saadati, M., Sharifimoghadam, S., Ahmadi, A., Mokhtarie, M., & Ansari, H. (2016). Sleep Quality in Medical Students; the Impact of Over-Use of Mobile CellPhone and Social Networks. *Journal of Research in Health Sciences*, 16(1), 46. [/pmc/articles/PMC7189085/](https://doi.org/10.4103/1683-7504.189085)
- Mostofsky, E., Mittleman, M. A., Buettner, C., Li, W., & Bertisch, S. M. (2019). Prospective Cohort Study of Caffeinated Beverage Intake as a Potential Trigger of Headaches among Migraineurs. *The American Journal of Medicine*, 132(8), 984. <https://doi.org/10.1016/J.AMJMED.2019.02.015>
- Murray, K., Godbole, S., Natarajan, L., Full, K., Hipp, J. A., Glanz, K., Mitchell, J., Laden, F., James, P., Quante, M., & Kerr, J. (2017). The relations between sleep, time of physical activity, and time outdoors among adult women. *PLoS One*, 12(9). <https://doi.org/10.1371/JOURNAL.PONE.0182013>
- Muttaqin, M. R., Rotinsulu, D. J., & Sulistiawati, S. (2021). Hubungan antara Kualitas Tidur dengan Tingkat Stres pada Mahasiswa Fakultas Kedokteran Universitas Mulawarman. *Jurnal Sains Dan Kesehatan*, 3(4), 586–592. <https://doi.org/10.25026/jsk.v3i4.618>
- Nayak, C., Sinha, S., Nagappa, M., Nagaraj, K., Kulkarni, G. B., Thennarasu, K., & Taly, A. B. (2016). Study of sleep microstructure in patients of migraine without aura. *Sleep & Breathing = Schlaf & Atmung*, 20(1), 263–269. <https://doi.org/10.1007/S11325-015-1207-X>
- Nurfadilah, S. H., Ahmad, R. A., & Julia, M. (2017). Aktivitas fisik dan screen based activity dengan pola tidur remaja di Wates. *Berita Kedokteran Masyarakat*, 33(7), 343–350. <https://doi.org/10.22146/bkm.17879>
- Nurrezki, S., & Irawan, R. (2020a). Hubungan Stres, Cemas, Dan Depresi Dengan Kejadian Migrain Pada Mahasiswa Kedokteran Di Jakarta. *Damianus: Journal of Medicine*, 19(1), 1–7. <https://doi.org/10.25170/djm.v19i1.1200>
- Nurrezki, S., & Irawan, R. (2020b). Kejadian Migrain Pada Mahasiswa Kedokteran

- di Jakarta Relationship of Depression , Anxiety , and Stress With The Incidence of Migraine Among Medical Students. *Damianus Journal of Medicine*, 19(1), 1–7.
- O’callaghan, F., Muurlink, O., & Reid, N. (2018). Effects of caffeine on sleep quality and daytime functioning. *Risk Management and Healthcare Policy*, 11, 263–271. <https://doi.org/10.2147/RMHP.S156404>
- Olesen, J. (2018). Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. *Cephalalgia*, 38(1), 1–211. <https://doi.org/10.1177/0333102417738202>
- Patel, A. K., Reddy, V., Shumway, K. R., & Araujo, J. F. (2022). Physiology, Sleep Stages. *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK526132/>
- Pilati, L., Battaglia, G., Di Stefano, V., Di Marco, S., Torrente, A., Raieli, V., Firenze, A., Salemi, G., & Brighina, F. (2020). Migraine and Sport in a Physically Active Population of Students: Results of a Cross-Sectional Study. *Headache*, 60(10), 2330–2339. <https://doi.org/10.1111/HEAD.14015>
- Priya, J., Singh, J., & Kumari, S. (2017). Study of the factors associated with poor sleep among medical students. *Indian Journal of Basic and Applied Medical Research*, 6, 422–429. www.ijbamr.com
- Putri, B. V. F. M., Amalia, E., & Sari, D. P. (2021). Hubungan Antara Burnout Dan Kualitas Tidur Dengan Prestasi Akademik Mahasiswa Kedokteran Universitas Mataram. *Prosiding Sanintek Lembaga Penelitian Dan Pengabdian Masyarakat Universitas Mataram*, 3(November 2020), 282–292.
- Rafi, A., Islam, S., Hasan, M. T., & Hossain, G. (2022). Prevalence and impact of migraine among university students in Bangladesh: findings from a cross-sectional survey. *BMC Neurology*, 22(1). <https://doi.org/10.1186/S12883-022-02594-5>
- Rezaei, M., Khormali, M., Akbarpour, S., Sadeghniaat-Hagighi, K., & Shamsipour, M. (2018). Sleep quality and its association with psychological distress and sleep hygiene: a cross-sectional study among pre-clinical medical students. *Sleep Science*, 11(4), 274. <https://doi.org/10.5935/1984-0063.20180043>
- Ruschel, M. A. P., & Jesus, O. De. (2022a). Migraine Headache. *Pain Medicine: An Essential Review*, 521–524. https://doi.org/10.1007/978-3-319-43133-8_138
- Ruschel, M. A. P., & Jesus, O. De. (2022b). Migraine Headache. In *Pain Medicine: An Essential Review*. StatPearls Publishing. https://doi.org/10.1007/978-3-319-43133-8_138
- Ruschel, M. A. P., & Jesus, O. De. (2023). Migraine Headache. *Pain Medicine: An*

- Essential Review*, 521–524. https://doi.org/10.1007/978-3-319-43133-8_138
- Saçmacı, H., Tanik, N., & İnan, L. E. (2022). Current Perspectives on the Impact of Chronic Migraine on Sleep Quality: A Literature Review. *Nature and Science of Sleep*, 14, 1783. <https://doi.org/10.2147/NSS.S335949>
- Safaringga, E., & Herpandika, R. P. (2018). Hubungan antara Kebugaran Jasmani dengan Kualitas Tidur. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, 4(2), 235. https://doi.org/10.29407/JS_UNPGRI.V4I2.12467
- Safhi, M. A., Alafif, R. A., Alamoudi, N. M., Alamoudi, M. M., Alghamdi, W. A., Albishri, S. F., & Rizk, H. (2020). The association of stress with sleep quality among medical students at King Abdulaziz University. *Journal of Family Medicine and Primary Care*, 9(3), 1662. https://doi.org/10.4103/JFMPC.JFMPC_745_19
- Sancho-Domingo, C., Carballo, J. L., Coloma-Carmona, A., & Buysse, D. J. (2021). Brief version of the Pittsburgh Sleep Quality Index (B-PSQI) and measurement invariance across gender and age in a population-based sample. *Psychological Assessment*, 33(2), 111–121. <https://doi.org/10.1037/PAS0000959>
- Sejbuk, M., Mironczuk-Chodakowska, I., & Witkowska, A. M. (2022). Sleep Quality: A Narrative Review on Nutrition, Stimulants, and Physical Activity as Important Factors. *Nutrients*, 14(9). <https://doi.org/10.3390/NU14091912>
- Setyorini, A., Mayangsari, M., Putu, N., & Kartika, V. (2022). Program Studi Sarjana Kedokteran dan Profesi Dokter Fakultas Kedokteran Universitas Udayana. *Medika Udayana*, 11(3), 76–81.
- Shafique, Z., Syed, F., Naz, S., Urooj, S., Khan, S., & Javed, S. (2021). Assessment of factors affecting the sleep hygiene of medical students in Bahawalpur, Pakistan: a cross-sectional study. *Sleep Science (Sao Paulo, Brazil)*, 14(3), 273–279. <https://doi.org/10.5935/1984-0063.20200063>
- Shrestha, O., Karki, S., Thapa, N., Lal Shrestha, K., Shah, A., Dhakal, P., Pant, P., Dhungel, S., & Shrestha, D. B. (2022). Prevalence of migraine and tension-type headache among undergraduate medical students of Kathmandu Valley: A cross-sectional study. *Health Science Reports*, 5(5). <https://doi.org/10.1002/HSR2.747>
- Singh, A. H., Bathla, M., Gupta, P., & Bhusri, L. (2023). Quality of Sleep and Disability Associated with Headache: Migraine versus Tension-Type Headache: A Comparative Study. *Annals of African Medicine*, 22(1), 11. https://doi.org/10.4103/AAM.AAM_241_21
- Song, T. J., Cho, S. J., Kim, W. J., Yang, K. I., Yun, C. H., & Chu, M. K. (2018a). Poor sleep quality in migraine and probable migraine: a population study. *The*

- Journal of Headache and Pain*, 19(1). <https://doi.org/10.1186/S10194-018-0887-6>
- Song, T. J., Cho, S. J., Kim, W. J., Yang, K. I., Yun, C. H., & Chu, M. K. (2018b). Poor sleep quality in migraine and probable migraine: a population study. *The Journal of Headache and Pain*, 19(1). <https://doi.org/10.1186/S10194-018-0887-6>
- Song, T. J., Yun, C. H., Cho, S. J., Kim, W. J., Yang, K. I., & Chu, M. K. (2018). Short sleep duration and poor sleep quality among migraineurs: A population-based study. *Cephalalgia : An International Journal of Headache*, 38(5), 855–864. <https://doi.org/10.1177/0333102417716936>
- Stanyer, E. C., Creaney, H., Nesbitt, A. D., Holland, P. R., & Hoffmann, J. (2021). Subjective Sleep Quality and Sleep Architecture in Patients With Migraine: A Meta-analysis. *Neurology*, 97(16), e1620. <https://doi.org/10.1212/WNL.00000000000012701>
- Steiner, T. J., Stovner, L. J., Jensen, R., Uluduz, D., & Katsarava, Z. (2020). Migraine remains second among the world's causes of disability, and first among young women: findings from GBD2019. *The Journal of Headache and Pain*, 21(1). <https://doi.org/10.1186/S10194-020-01208-0>
- Stovner, L. J., Nichols, E., Steiner, T. J., Abd-Allah, F., Abdelalim, A., Al-Raddadi, R. M., Ansha, M. G., Barac, A., Bensenor, I. M., Doan, L. P., Edessa, D., Endres, M., Foreman, K. J., Gankpe, F. G., Gopalkrishna, G., Goulart, A. C., Gupta, R., Hankey, G. J., Hay, S. I., ... Murray, C. J. L. (2018). Global, regional, and national burden of migraine and tension-type headache, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet. Neurology*, 17(11), 954. [https://doi.org/10.1016/S1474-4422\(18\)30322-3](https://doi.org/10.1016/S1474-4422(18)30322-3)
- Sulana, I. O. P., Sekeon, S. A. S., & Mantjoro, E. M. (2020). Hubungan Tingkat Stres dengan Kualitas Tidur Mahasiswa Tingkat Akhir Fakultas Kesehatan Masyarakat Universitas Samratulangi. *Jurnal KESMAS*, 9(7), 37–45.
- Sullivan Bisson, A. N., Robinson, S. A., & Lachman, M. E. (2019). Walk to a better night of sleep: testing the relationship between physical activity and sleep. *Sleep Health*, 5(5), 487–494. <https://doi.org/10.1016/J.SLEH.2019.06.003>
- Sutrisno, R., Faisal, F., & Huda, F. (2017). Perbandingan Kualitas Tidur Mahasiswa Fakultas Kedokteran Universitas Padjadjaran yang Menggunakan dan Tidak Menggunakan Cahaya Lampu saat Tidur. *Jurnal Sistem Kesehatan*, 3(2). https://jurnal.unpad.ac.id/jsk_ikm/article/view/15006
- Tahir, M. J., Malik, N. I., Ullah, I., Khan, H. R., Perveen, S., Ramalho, R., Siddiqi, A. R., Waheed, S., Mohamed Shalaby, M. M., de Berardis, D., Jain, S., Vetrivendan, G. L., Chatterjee, H., Gopar Franco, W. X., Shafiq, M. A.,

- Fatima, N. T., Abeysekera, M., Sayyeda, Q., Shamat, S. F., ... Pakpour, A. H. (2021). Internet addiction and sleep quality among medical students during the COVID-19 pandemic: A multinational cross-sectional survey. *PLoS ONE*, *16*(11). <https://doi.org/10.1371/JOURNAL.PONE.0259594>
- Tentero, I. N., Pangemanan, D. H. C., & Polii, H. (2016). Hubungan diabetes melitus dengan kualitas tidur. *Jurnal E-Biomedik*, *4*(2). <https://doi.org/10.35790/ebm.4.2.2016.14626>
- Tiseo, C., Vacca, A., Felbush, A., Filimonova, T., Gai, A., Glazyrina, T., Hubalek, I. A., Marchenko, Y., Overeem, L. H., Piroso, S., Tkachev, A., Martelletti, P., & Sacco, S. (2020a). Migraine and sleep disorders: a systematic review. *The Journal of Headache and Pain*, *21*(1). <https://doi.org/10.1186/S10194-020-01192-5>
- Tiseo, C., Vacca, A., Felbush, A., Filimonova, T., Gai, A., Glazyrina, T., Hubalek, I. A., Marchenko, Y., Overeem, L. H., Piroso, S., Tkachev, A., Martelletti, P., & Sacco, S. (2020b). Migraine and sleep disorders: a systematic review. *The Journal of Headache and Pain*, *21*(1). <https://doi.org/10.1186/S10194-020-01192-5>
- Tiseo, C., Vacca, A., Felbush, A., Filimonova, T., Gai, A., Glazyrina, T., Hubalek, I. A., Marchenko, Y., Overeem, L. H., Piroso, S., Tkachev, A., Martelletti, P., & Sacco, S. (2020c). Migraine and sleep disorders: a systematic review. *The Journal of Headache and Pain*, *21*(1). <https://doi.org/10.1186/S10194-020-01192-5>
- Todd, C., Lagman-Bartolome, A. M., & Lay, C. (2018). Women and Migraine: the Role of Hormones. *Current Neurology and Neuroscience Reports*, *18*(7). <https://doi.org/10.1007/S11910-018-0845-3>
- Togha, M., Haghdoost, F., Khorsha, F., Razeghi Jahromi, S., & Ghorbani, Z. (2019). Body Mass Index and its Association with Migraine Characteristics in Female Patients. *Archives of Iranian Medicine*, *22*(10), 554–559.
- Varga, B., Gergely, A., Galambos, Á., & Kis, A. (2018). Heart Rate and Heart Rate Variability during Sleep in Family Dogs (*Canis familiaris*). Moderate Effect of Pre-Sleep Emotions. *Animals : An Open Access Journal from MDPI*, *8*(7), 107. <https://doi.org/10.3390/ANI8070107>
- Vgontzas, A., & Pavlović, J. M. (2018). Sleep Disorders and Migraine: Review of Literature and Potential Pathophysiology Mechanisms. *Headache*, *58*(7), 1030. <https://doi.org/10.1111/HEAD.13358>
- Vitale, J. A., La Torre, A., Banfi, G., & Bonato, M. (2019). Acute sleep hygiene strategy improves objective sleep latency following a late-evening soccer-specific training session: A randomized controlled trial. *Journal of Sports Sciences*, *37*(23), 2711–2719.

<https://doi.org/10.1080/02640414.2019.1661938>

- Wang, X., Zhou, H. B., Sun, J. M., Xing, Y. H., Zhu, Y. L., & Zhao, Y. S. (2016). The prevalence of migraine in university students: a systematic review and meta-analysis. *European Journal of Neurology*, 23(3), 464–475. <https://doi.org/10.1111/ENE.12784>
- Watson, E. J., Coates, A. M., Kohler, M., & Banks, S. (2016). Caffeine Consumption and Sleep Quality in Australian Adults. *Nutrients*, 8(8). <https://doi.org/10.3390/NU8080479>
- Wijeratne, T., Grisold, W., Dodick, D., & Carroll, W. (2019). World Brain Day 2019: migraine, the painful truth. *The Lancet Neurology*, 18(10), 914. [https://doi.org/10.1016/S1474-4422\(19\)30281-9](https://doi.org/10.1016/S1474-4422(19)30281-9)
- Wilckens, K. A., Erickson, K. I., & Wheeler, M. E. (2018). Physical Activity and Cognition: A Mediating Role of Efficient Sleep. *Behavioral Sleep Medicine*, 16(6), 569–586. <https://doi.org/10.1080/15402002.2016.1253013>
- Yang, H., Pu, S., Lu, Y., Luo, W., Zhao, J., Liu, E., Yang, J., Luo, X., Tang, X., Zeng, C., Chen, J., & Luo, J. (2022a). Migraine among students of a medical college in western China: a cross-sectional study. *European Journal of Medical Research*, 27(1), 1–11. <https://doi.org/10.1186/s40001-022-00698-9>
- Yang, H., Pu, S., Lu, Y., Luo, W., Zhao, J., Liu, E., Yang, J., Luo, X., Tang, X., Zeng, C., Chen, J., & Luo, J. (2022b). Migraine among students of a medical college in western China: a cross-sectional study. *European Journal of Medical Research*, 27(1), 71. <https://doi.org/10.1186/S40001-022-00698-9>
- Yang, M., Kopi, M., Fakultas, D. I., Udayana, U., & Pristiana, D. (2021). Kualitas kemampuan tidur merupakan suatu untuk seseorang tidak mengalami kantuk keadaan yang menggambarkan tentang seseorang mempertahankan siklus tidur dan tidak terhadap fungsi Coffee Association United States tahun 2011 , terjadi peningkatan konsumsi k. *Archive of Community Health*, 8(2), 372–387.
- Zevallos-Vásquez, A., Pajuelo-Salazar, K. A., & Alarco, J. J. (2023). Migraine, associated factors, and functional disability in medical students at a peruvian university during the COVID-19 pandemic: An analytical cross-sectional study. *Heliyon*, 9(7), e18108. <https://doi.org/10.1016/J.HELIYON.2023.E18108>
- Zhao, J., Cen, Y., Yang, J., Liu, C., Li, Y., Ren, Z., Xiao, Y., He, J. L., Luo, J., Zhong, Y., Luo, W., Wu, J., & Luo, J. (2022). Prevalence and correlates of sleep quality in the Chinese college students with migraine: a cross-sectional study. *Frontiers in Behavioral Neuroscience*, 16, 1037103. <https://doi.org/10.3389/FNBEH.2022.1037103>