SINGAPORE SLEEP REVIEW

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Mapping Sleep Medicine Training in Asia

Worldwide, sleep medicine is a growing field, with big advancements in understanding, diagnosis, and treatment of sleep disorders.

However, sleep medicine as a specialty is still relatively new in many Asian countries and regions, and there are big differences in training programs for doctors and technologists. To address this, the Asian Society of Sleep Medicine (ASSM) started a project to survey these differences and find ways to improve and standardize training. The ASSM Task Force, including dr Leow Leong Chai, director of the SingHealth Duke-NUS Sleep Centre and Chair of the Chapter of Sleep Medicine Physicians of the Academy of Medicine Singapore, surveyed sleep medicine training practices in 29 Asian countries/regions. With a 83% response rate the eventual data set covered 25 countries/regions. Out of these countries, only 8 recognised and accredited sleep medicine as a separate specialty.

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The new Exco will be keen to continue the work that was initiated in the previous term. Some of these initiatives include the development of clinical guidelines for OSA, for which we hopefully have more updates later, and international collaborations in streamlining sleep medicine training across Asia. Feel free to get in touch if you have any ideas or suggestions on how we can best serve the community or if you would like to see any research or events highlighted in our newsletter.

Attend

World Sleep



published on the <u>SSS website</u>.

We are happy to announce that during

the Annual General Meeting held on 28th

Aug 2024, a new Executive Committee

has been elected. For the 2024-2026

term, the Exco will resume under the

leadership of dr Michael Lim (president),

dr Garvi Pandya (honorary secretary),

and dr Phua Chu Qin (honorary

treasurer). The full Exco details are

SSS News

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SLEEP MEDICINE TRAINING IN ASIA

Mapping out the current state of sleep medicine training across 29 Asian countries

PEDIATRIC OBESITY

A review of guidelines and recommendations for OSA screening / management in childhood obesity

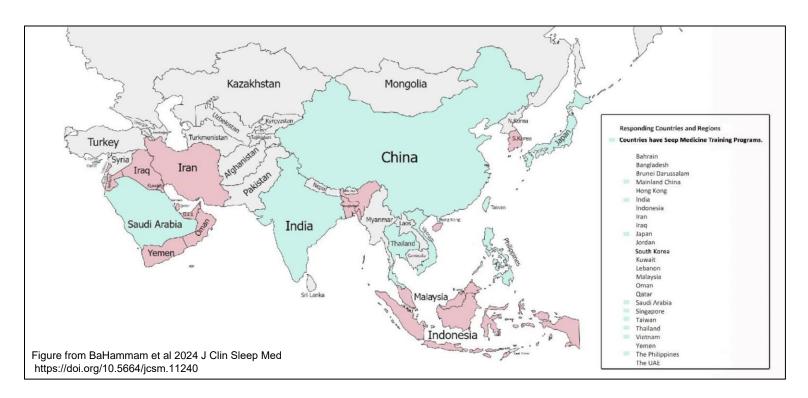
SLEEP VARIABILITY

Review reveals risks for cardiovascular health and cognition associated with irregular sleep patterns

QUALITY OF LIFE

Associations between sleep and physical and mental aspects of quality of life





The same 8 countries also recognized and accredited sleep technologist as a separated specialty. While in most countries the Asian Accreditation Practice Guidelines from the ASSM were known, adoption varied between countries, and other international guidelines like the American Academy for Sleep Medicine were also used.

Thirteen countries had included sleep medicine as a rotation within residency training, and 9 countries/regions had training programs with written curricula to obtain Board certification (See Figure). The duration of these training programs ranged from 6 months to 3 years. While the training programs were overseen by a National Health Authority in two countries, other countries' programs were hospital/university based. Countries that did not have a Sleep Medicine training program cited a variety of barriers, including lack of trained sleep physicians/technologists, lack of national accreditation, and challenges in multi-disciplinary cooperation. Lack of funding weas also cited.

While these disparate findings point towards the different healthcare frameworks and available resources across countries, they also highlight the growth potential and the need for standardization of Asian Sleep Medicine curriculum. The ASSM Task Force is aiming to do this.

Reference. BaHammam et al. (2024) Asian Society of Sleep Medicine Research Group. Mapping the landscape of sleep medicine training across Asia. J Clin Sleep Med. 2024 Jun 19. https://doi.org/10.5664/jcsm.11240



Childhood obesity and OSA

Reference: Ng, N.B.H, et al., 2024. Screening for obstructive sleep apnea (OSA) in children and adolescents with obesity: A scoping review of national and international pediatric obesity and pediatric OSA management guidelines. Obesity Reviews, 25(5), p.e13712. <u>https://doi.org/10.1111/obr.13712</u>

OSA is prevalent in children and adolescents with obesity, however, there is a substantial variation in recommendations for screening and managing OSA in pediatric obesity in guidelines. A team from the Khoo Teck Puat-National University Children's Medical Institute (National University Health System) reviewed existing guidelines issued by international and national professional bodies for pediatric obesity and pediatric OSA management.

Lead author, Dr Nicholas Ng explains: "[OSA] is a common complication of childhood obesity. Metabolic complications like diabetes and hypertension set in later (usually >10 years or after puberty); but OSA can be an early complication even in young children with overweight/ obesity. Some studies show up to 60% of children with obesity have some degree of OSA. In my practice I would say 3-4/10 have symptoms sufficient enough for me to refer them on for a sleep study."

The team reviewed 40 published professional guidelines. Out of 30 obesity guidelines, only about half (n=16, 53%) did discuss screening for OSA. However, there was significant variation in the details and actual recommendations proposed. While most guidelines did mention OSA severity as an indication for obesity management strategies, only two guidelines discussed OSA-specific interventions. In addition, 10 guidelines for pediatric OSA management were reviewed. All mentioned obesity as a risk factor for OSA, but only 2 included a specific discussion of OSA management in individuals with obesity. The heterogeneity across these guidelines may partly be due to differences in priorities in healthcare allocation, where some countries may experience stronger urgency for treating metabolic complications of obesity versus OSA symptoms. The availability and accessibility of pediatric sleep specialists and PSG facilities is also not equal across countries, and different professional organisations apply different criteria for the definition of childhood obesity.

Following these mixed findings, the team set out to formulate a

Dr Nicholas Ng

set of standard guidelines, Dr Ng explains: "Standardized recommendations for screening are important as these will help clinicians systematically screen for these complications, and institute early intervention when detected in children and adolescents with obesity."

Recommendations by the authors for OSA screening in children with overweight/ obesity

- Commence screening for children with BMI > 85th percentile or rapid weight gain (crossing 2 percentiles upwards), with no specific age threshold for screening.

- First-line screening: clinical assessment with history taking for OSA symptoms + Physical examination for tonsillar hypertrophy.

[History: Symptoms during sleep—frequent snoring (≥3) nights/week), paradoxical chest-abdominal movement, choking or gasping in sleep, apneic episodes, nocturnal enuresis (especially secondary enuresis), sleeping in unusual positions, especially with the neck hyperextended, mouth breathina. Symptoms awake-headaches when on awakening, daytime attention or sleepiness, poor concentration]

- Confirming diagnosis: referral to sleep specialist for PSG-sleep study; lab-based preferred; alternatives e.g., portable home PSG, overnight pulse oximetry, if PSG is not available (but there is insufficient evidence to recommend one alternative strategy over another).

- Recommendations for further management to be made in consultation with pediatric sleep and/or ENT specialist.





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Sleep regularity, cardiovascular health, and cognition in elderly

Reference: Qin & Chee. (2024). The Emerging Importance of Sleep Regularity on Cardiovascular Health and Cognitive Impairment in Older Adults: A Review of the Literature, Nature and Science of Sleep, 585-597. https://doi.org/10.2147/NSS.S452033

Older adults often complain about not sleeping well. While "sleeping well" is subjective and can mean different things, most sleep hygiene advice focuses primarily on sleep duration. Not getting enough sleep is indeed linked to various health issues, including heart and kidney disease, hypertension, and depression. However, recent evidence from daily sleep recordings suggests that maintaining a regular sleep routine may have an even more profound impact on health, particularly for seniors.

A review published earlier this year in Nature and Science of Sleep summarized results from 22 studies on the relationship between sleep regularity and health in older adults. The findings revealed that seniors with consistent sleep schedules experience better cardiovascular health, improved cognitive performance, and a lower risk of allcause mortality.

In conclusion, while sleep duration is important, maintaining a regular sleep schedule appears equally, if not more, crucial for the health of older adults. As evidence continues to grow, prioritizing sleep regularity could be a powerful strategy for enhancing well-being and longevity, making it a key aspect of promoting better health in seniors.

Disclaimer: This publication is not intended as a replacement of regular medical education. The reviews are a summarized interpretation of the published studies and reflect the opinions of the writer rather than those of the research group or the scientific journal. It is suggested that the reader reviews the full trial data before forming a final conclusion on its merits.

Associations between sleep quality and quality of life

Reference: Tay, E.H., Koh, Y.S., Vaingankar, J.A. *et al.* (2024). Association between sleep quality and quality of life in Singapore. *Qual Life Res* **33**, 1707–1717. <u>https://doi.org/10.1007/s11136-024-03621-3</u>

Poor sleep and sleep problems can impede quality of life in different ways. General associations between sleep quality and quality of life have been reported in several studies. However, quality of life can be compromised in different domains. A cross-sectional survey among 6126 Singapore residents examined how sleep related to physical aspects (e.g. general health, limited in physical activities, pain) and mental aspects (e.g. vitality, depression, limited social activities) of quality of life.

Results showed that physical components were related to sleep quality, duration, disturbances and daytime dysfunction, while mental components were correlated with sleep quality, sleep latency, disturbances, daytime dysfunction, and sleep medication use, after controlling for demographic, socio-economic, and health-related factors.

Physical factors had more impact in older people, while mental factors were more influential in younger people. These findings show that different sleep outcomes are not uniformly associated with all aspects of quality of life. This implies that different interventions might be effective depending on the type of sleep problem presented.

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CALENDAR

 10-11 SEP
 Hypoglossal Nerve Stimulation Workshop
SingHealth ENT Head & Neck Instructional Course Fortnight

 ENT2401_Hypoglossal.pdf (singhealthacademy.edu.sg)

 24-27 SEP
 ESRS 2024
The 27th Conference of the European Sleep Research Society
Seville, Spain, https://esrs.eu/sleep-congress/

 16-19 OCT
 Sleep DownUnder 2024
The 35th annual scientific meeting of the Australasian Sleep Association
and the Australian and New Zealand Sleep Science Association

Queensland, Australia, https://sleep.org.au/Public/Public/Events/SDU2024.aspx

SAVE THE DATE



Singapore Sleep Society

Membership Application and Fees

Ordinary members \$30/year – sleep professionals with a medical degree, PhD or equivalent.

Associate members: \$10/year – any person involved in the field of sleep disorders without the above qualification.

Supporting members: Corporations and individuals supporting the society financially.

Complete the <u>application form</u> and email to: <u>singaporesleepsociety.sg@gmail.com</u>

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