

The Price of a Quiet Mind: The Global Sleep Economy, Mental Health, and the Divide in Slumber

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ABSTRACT

The global sleep economy comprising devices, apps, nutraceuticals, sleep tourism, and digital therapeutics has become deeply intertwined with the pursuit of mental well-being, offering a market-based response to the transdiagnostic role of sleep disturbance in psychological distress. This conceptual review extends existing analyses of the sleep-mental health convergence by situating consumption patterns and therapeutic claims within divergent economic and cultural contexts. It examines how the sleep economy manifests across developed nations, emerging economies with a detailed focus on Malaysia, and low-income developing countries, revealing a triple-tracked landscape. In advanced economies, the quantified self and digital cognitive-behavioral therapy for insomnia (CBT-I) dominate, yet generate novel anxieties such as orthosomnia. Emerging economies like Malaysia, India, and China are characterized by rapid technological adoption alongside the persistence of herbal and spiritual remedies, a hybridity shaped by rising lifestyle-related insomnia, a growing middle-class wellness consciousness, and culturally embedded holistic health paradigms. Meanwhile, in low-income developing nations, the formal sleep economy is largely absent; sleep remains a neglected public health concern, addressed through traditional healers and over-the-counter sedatives, with mental health implications that are profoundly undermanaged. The paper identifies three cross-cutting tensions medicalization versus consumerization, evidence versus market claims, and inequality and demonstrates how these tensions manifest distinctly across each development tier. It concludes with a call for culturally situated, equity-oriented research and regulatory frameworks that can accommodate the sleep economy's global expansion without deepening existing disparities or trivializing psychiatric illness.

Keywords: sleep economy, mental health, Malaysia, emerging economies, developing countries, orthosomnia, digital CBT-I, traditional medicine

INTRODUCTION

Disturbed sleep is one of the most robust transdiagnostic risk factors for mental disorders, with a vast epidemiological literature confirming that insomnia, nightmares, and circadian dysregulation predict and perpetuate depression, anxiety, and suicidal ideation (Baglioni et al., 2016; Hertenstein et al., 2019). In parallel, a sprawling commercial ecosystem, the sleep economy has come to reframe the biological need for rest as a

consumer opportunity intimately connected to emotional wellness. Valued at over US\$80 billion globally and expanding at an annual rate of 6–8%, this market encompasses wearable sleep trackers, smart bedding, sleep apps, melatonin-infused beverages, bespoke sleep retreats, and prescription digital therapeutics (Grand View Research, 2024; P&S Intelligence, 2023). Critically, its growth is no longer driven purely by the search for physical comfort; rather, the industry’s dominant marketing narrative promises mental tranquillity, stress reduction, and resilience against burnout, effectively positioning the sleep economy as a de facto mental health marketplace.

While the convergence of sleep, technology, and mental health has received scholarly attention, much of the existing critique is drawn from the experience of high-income Western societies and focuses on phenomena such as orthosomnia, also known as an obsessive quest for perfect sleep metrics (Baron et al., 2017). Far less has been written about how the sleep economy is unfolding across the rest of the world, where income levels, cultural models of health, regulatory capacity, and the burden of untreated mental illness differ substantially. Emerging economies such as Malaysia, India, China, and Brazil are witnessing a rapid uptake of consumer sleep technologies and nutraceuticals even as traditional healing systems retain significant cultural authority. In contrast, low-income developing nations often still termed “third world” in development discourse are largely lack a formal sleep economy altogether, and the mental health impact of systemic sleep deprivation is obscured by the absence of products, providers, and data.

Elephant in the room : Sleep economy rationale or business?

This inquiry is both timely and necessary for several converging reasons. First, the global mental health burden continues to escalate, with depression and anxiety now ranking among the leading causes of disability worldwide (World Health Organization, 2022). Because sleep disruption is a modifiable pathway implicated in the onset and maintenance of these conditions, any market or policy force that alters how societies sleep simultaneously shapes population mental health. The sleep economy, by targeting the consumer’s desire for emotional calm and resilience, is quietly becoming one of the largest non-clinical mental health interventions in existence, yet its impact has never been systematically mapped across development contexts.

Second, the unprecedented speed of the sleep economy’s expansion has outpaced regulatory frameworks, scientific validation, and public health preparedness. Products making mental health claims such as “reduces anxiety” or “quiets the racing mind” are reaching millions of consumers globally, often without rigorous evidence of efficacy or safety. In emerging economies, where regulatory oversight of digital health and nutraceuticals is frequently weaker, the potential for harm ranging from financial exploitation to delayed psychiatric care or iatrogenic anxiety is substantial. Understanding how these trends unfold in Malaysia and analogous economies is therefore an urgent consumer protection and public health priority.

Third, the sleep economy risks exacerbating existing mental health inequities. While wealthy populations in developed nations and urban elites in middle-income countries optimize their sleep with costly wearables and retreats, low-income communities in both emerging and developing nations endure chronic sleep deprivation with minimal support. Documenting this triple-tracked reality is essential to ensure that the global conversation on sleep and mental health does not exclusively cater to those who can afford a subscription to calm. This study gives voice to that imbalance and insists that the sleep economy be examined not only as a commercial phenomenon but as a social determinant of mental health.

Finally, the COVID-19 pandemic has accelerated sleep problems and mental distress worldwide, while simultaneously normalising digital health tools. In this altered landscape, the sleep economy is poised to become an even more powerful player in how individuals manage psychological well-being. Without evidence-informed analysis, the discourse on sleep and mental health risks being captured by commercial interests, sidelining the structural and cultural factors that shape who sleeps well and who does not. For these reasons, this study merits the attention of scholars, clinicians, policymakers, and global health advocates who seek to ensure that the commodification of rest serves public mental health rather than undermining it.

Mental Health Nexus and the Emergence of a Consumer Market

Sleep disturbance is not merely a symptom of psychiatric conditions; it is a pathogenic mechanism. Prospective meta-analyses have demonstrated that insomnia roughly doubles the risk of subsequent major depression and anxiety disorders, while nightmares constitute a core feature of post-traumatic stress disorder (Baglioni et al., 2011; American Psychiatric Association, 2022). Mechanistic studies point to sleep's role in emotion regulation through prefrontal-amygdala connectivity, overnight consolidation of affective memories, and diurnal regulation of the stress hormone cortisol (Yoo et al., 2007; Harvey, 2011). This scientific understanding has elevated sleep from a personal lifestyle concern to a legitimate therapeutic target, lending credibility to interventions that promise mental health benefits through better rest.

The sleep economy has organized itself around this promise. Among developed markets, the most prominent segments include wearable sensors and nearables (Oura Ring, Apple Watch, Withings Sleep Analyzer) that provide nightly estimates of sleep architecture and stress-related metrics such as heart rate variability; smart bedding systems that regulate temperature based on sleep stage; audio apps offering guided meditations, sleep stories, and binaural beats explicitly designed to quiet the anxious mind; and an expanding pharmacopeia of nutraceuticals such as melatonin, magnesium, L-theanine, cannabidiol (CBD), and adaptogenic herbs which are marketed not as hypnotics but as remedies for bedtime rumination (Grand View Research, 2024). Prescription digital CBT-I platforms, such as Sleepio and Somryst, represent the most scientifically validated segment, having earned regulatory clearance and demonstrated improvements in both insomnia and co-morbid depression (Espie et al., 2019). This suite of offerings collectively constructs the idea that optimal sleep is purchasable, measurable, and inextricably linked to psychological flourishing.

A Triple-Track Global Landscape: Developed, Emerging, and Developing Economies

The universality of the need for sleep masks profound geographic inequalities in how it is commodified, accessed, and linked to mental health. The global sleep economy is best understood as operating on three distinct tracks, each with its own drivers, challenges, and psychological implications.

In developed nations primarily North America, Western Europe, Japan, Australia, and South Korea, the sleep economy has matured around high technological penetration, strong mental health literacy, and disposable incomes that allow for spending on wellness optimization. Sleep tracking has become a normative feature of the quantified-self movement, often integrated into corporate wellness programs that offer subscriptions to Calm or Headspace as an employee benefit (International Foundation of Employee Benefit Plans, 2023). The conversation around orthosomnia emerged precisely in this context, with case reports describing patients who develop performance anxiety around their nightly sleep scores (Baron et al., 2017). Sleep tourism, too, is a luxury manifestation unique to affluent economies; high-end hotels and retreats in Switzerland, the Maldives, and California market multi-night programs that combine CBT-I coaching, circadian lighting, and spa treatments as antidotes to executive burnout. The mental health framing is explicit: these products are sold as emotional reset protocols, blurring the boundary between therapeutic intervention and conspicuous consumption. At the same time, the regulatory apparatus in developed countries, while imperfect, does provide a baseline of oversight for digital therapeutics and, to a lesser extent, for consumer wearables, creating a landscape in which evidence-based tools can coexist alongside unvalidated wellness gadgets.

Emerging economies present a more hybrid, rapidly shifting picture. In Malaysia, a Southeast Asian upper-middle-income country that serves as a useful bellwether for the region—the sleep economy is experiencing a dual trajectory. On one hand, there is a marked increase in lifestyle-related sleep complaints. A systematic review of Malaysian adult populations estimated that between 35% and 50% of respondents report poor sleep quality, with contributing factors including urban job stress, shift work, and excessive screen use, all known correlates of anxiety and depression (Zailinawati et al., 2012; Loh et al., 2021). In response, international sleep-tech brands have entered the market aggressively, with e-commerce platforms such as Shopee and Lazada making wearable devices, melatonin gummies, and sleep-enhancing teas readily accessible. The Malaysian government's push towards digital health, including the MyDigital Blueprint, has further normalized health-related app use among educated urbanites. Yet, this technological uptake coexists with a deep-rooted reliance on traditional Malay, Chinese, and Ayurvedic medicine for sleep and emotional well-being. Herbal preparations containing valerian,

passionflower, or tongkat ali are commonly consumed, and traditional massage (urut) is frequently sought for stress-induced sleeplessness. The result is a clinical and commercial landscape in which a professional working in Kuala Lumpur might simultaneously use a Fitbit to monitor sleep, drink a herbal infusion recommended by a traditional practitioner, and never discuss insomnia with a psychiatrist, given the stigma that still surrounds mental illness. More broadly, across emerging economies such as India, China, Indonesia, and Brazil, the sleep economy reflects a pattern of rapid, class-stratified adoption. Urban elites enjoy access to the same digital tools and supplements as their counterparts in developed nations, while rural populations often rely on a patchwork of over-the-counter sedating antihistamines, benzodiazepines obtained without prescription, and traditional healers. The mental health implications are significant yet underresearched. For instance, India's sleep technology market is projected to grow at double-digit rates, driven by stress-related insomnia among IT professionals and students, yet there is virtually no published work examining whether the use of these devices ameliorates or exacerbates anxiety in South Asian cultural contexts (P&S Intelligence, 2023). The emerging-market story is therefore one of deeply uneven modernization, in which commodified sleep solutions enter a mental health ecosystem still characterized by severe shortages of psychiatrists and psychologists.

In low-income developing countries often referred to collectively as the “Global South” or, in earlier parlance, the “third world”, the formal sleep economy is almost entirely absent. Sleep remains a profoundly neglected dimension of global health, overshadowed by infectious disease, maternal mortality, and malnutrition. Here, the relationship between sleep and mental health is defined by the structural violence of poverty: individuals living in crowded, noisy, or unsafe environments, often working multiple jobs or unpredictable shift schedules, experience chronic sleep deprivation that exerts a heavy but invisible toll on emotional well-being. There are no smart mattresses, no sleep coaches, no subscription apps. Treatment for insomnia, when it exists, typically comes in the form of cheap generic benzodiazepines or tricyclic antidepressants dispensed by informal drug sellers, with significant risks of dependence and side effects (Patel et al., 2020). Traditional and religious healing practices, which may conceptualize sleep problems as spiritual or supernatural in origin, are the first line of support for the vast majority. The mental health impact is devastating but unmeasured: in such settings, the bidirectional relationship between sleep disturbance and depression operates against a backdrop of extreme adversity, yet neither component receives adequate attention. Any discussion of the global sleep economy must therefore acknowledge that for hundreds of millions of people, the market for sleep is not an arena of optimization but an absence or a void that mirrors the broader treatment gap for mental disorders in low-resource settings.

Critical Considerations in a Global Frame

Three critical themes raised in prior literature which are medicalization versus consumerization, the evidence gap, and inequality take on new inflections when viewed through a global lens.

First, the tension between medicalization and consumerization of sleep is not uniform. In developed nations, the sleep economy risks over-medicalizing normal variations in sleep, turning a natural function into a pathology in need of continuous monitoring and optimization; this is the core dynamic behind orthosomnia. In Malaysia and comparable emerging economies, however, the same products can serve a dual purpose: for some, they provide a destigmatized entry point to mental health conversation, while for others, they bypass formal psychiatric care by offering a technologically packaged, wellness-branded alternative to seeing a doctor. In low-income settings, the absence of medicalized sleep products does not mean the absence of pathology, it means that sleep and mental health problems remain untreated, treated ineffectively through informal channels, or somatized into physical complaints that never receive a psychological diagnosis.

Second, the evidence gap between commercial claims and scientific validation is a universal problem but with dangerous local consequences. A Malaysian consumer purchasing a sleep supplement that promises to “quiet a racing mind” may have no access to objective information about its efficacy and safety, given weaker regulatory oversight of dietary supplements in many emerging markets. The same holds for sleep-tracking apps that perform poorly against polysomnography in populations with clinical insomnia (Chinoy et al., 2021); in contexts where sleep laboratories are rare, consumer devices may inadvertently become the de facto diagnostic standard, with users self-adjusting their sleep habits based on inaccurate data that feeds health anxiety.

Third, inequality is not merely a matter of income but also of infrastructure and culture. The digital divide ensures that even in middle-income countries, the sleep economy remains an urban phenomenon. Rural communities in Malaysia's East Coast or the interior of Sarawak are not participating in the app-based sleep wellness movement, despite likely bearing a similar or higher burden of stress-related insomnia. Globally, the sleep economy, like the wellness industry at large, tends to channel resources toward those already privileged, reinforcing sleep-health disparities along the same lines as mental-health disparities (Grandner et al., 2016). The very existence of a multi-billion-dollar industry devoted to rest highlights a stark moral paradox: some pay to optimize sleep they already largely have, while others suffer profound sleep deprivation that no market mechanism is designed to relieve.

CONCLUSION AND FUTURE DIRECTIONS

The sleep economy has succeeded in positioning itself as a mental health marketplace, a commercial sphere where the purchase of a wearable, a subscription, or a supplement is framed as an act of emotional self-care. Yet the lived reality of this marketplace is deeply segmented by geography and economic development. In developed nations, the risk is that a culture of sleep optimization exacerbates the anxieties it purports to soothe. In emerging economies such as Malaysia, the blend of high-tech solutions and traditional healing presents both an opportunity for culturally resonant interventions and a risk of untested, unregulated consumption. In the developing world, the sleep economy's absence underscores a larger failure to integrate sleep and mental health into the global public health agenda.

To move forward, researchers must pursue cross-country comparative studies that track mental health outcomes associated with sleep product use in diverse cultural settings. Regulatory bodies in emerging economies need to strengthen oversight of sleep-related health claims made by apps and supplements, while international health organizations should incorporate sleep into mental health initiatives in low-income regions, potentially through scalable, evidence-based interventions such as simplified group CBT-I delivered by community health workers. The sleep economy, for all its commercial excesses, has demonstrated that people are willing to invest in rest as a pathway to emotional well-being. The challenge for scholars, clinicians, and policymakers is to ensure that this investment translates into genuine mental health gains, not only for those who can afford a smart mattress, but for everyone who needs a good night's sleep.

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