



Review Article

Digital Lifestyle and Health: An Ayurvedic Perspective on Screen Time, *Nidra* and *Manas* — A Critical Review

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Abstract

The rapid expansion of digital technology has transformed human lifestyle, communication, education, and occupational patterns. Excessive use of smartphones, computers, tablets, and digital media has introduced a new set of health concerns collectively associated with a sedentary digital lifestyle. Increased screen exposure, especially during evening and nighttime hours, has been linked with sleep disturbances, reduced attention span, emotional dysregulation, anxiety, visual strain, and altered cognitive functions. Modern research highlights the role of blue light exposure, circadian rhythm disruption, psychological stimulation, and reduced physical activity in producing these effects. Ayurveda emphasizes the importance of balanced lifestyle through the concepts of *Dinacharya*, *Nidra*, *Manas*, and regulation of sensory activities (*Indriya Nigraha*). Excessive and inappropriate engagement with sensory objects is described as a form of *Asatmya Indriyarth Samyoga* and *Prajnaparadha*, which may disturb mental and physiological equilibrium. This review critically analyzes the impact of digital lifestyle on health through both modern and Ayurvedic perspectives. Classical Ayurvedic texts and recent scientific literature from

PubMed, Scopus, Web of Science, and Google Scholar were reviewed. The analysis suggests that prolonged digital exposure may be correlated with disturbance of *Vata Dosha*, impairment of *Manovaha Srotas*, disturbed *Nidra*, and reduced mental stability. Ayurvedic approaches including lifestyle regulation, *Dinacharya*, yoga, meditation, *Nasya*, and *Medhya Rasayana* may provide preventive strategies for maintaining psychological and physiological balance in the digital era.

Keywords

Digital lifestyle, screen time, *Nidra*, *Manas*, Ayurveda, mental health, circadian rhythm

1. Introduction

Digital technology has become an essential part of modern life. Smartphones, computers, televisions, and internet-based platforms are now integrated into education, communication, healthcare, and professional activities.

However, increasing dependence on digital devices has resulted in prolonged screen exposure and reduced physical activity. This phenomenon has created a new lifestyle pattern often referred to as a **digital lifestyle**.

Excessive screen use has been associated with:

- Sleep disturbances
- Reduced concentration
- Psychological stress
- Anxiety and mood changes
- Digital eye strain
- Reduced social interaction [1]

Children and young adults are particularly vulnerable because brain development, emotional regulation, and sleep patterns are highly sensitive during these stages [2].

Modern research suggests that screen-related health problems occur due to:

- Blue light exposure
- Melatonin suppression
- Circadian rhythm disturbance
- Continuous sensory stimulation
- Sedentary behavior [3]

Ayurveda emphasizes that maintenance of health depends on harmony between body, senses, mind, and consciousness.

Concepts such as:

- *Nidra* (sleep)
- *Manas* (mind)
- *Indriya* (sensory faculties)
- *Dinacharya* (daily routine)

form the foundation of healthy living [4].

Excessive engagement with sensory objects is described as *Asatmya Indriyarth Samyoga*, while improper lifestyle choices are considered forms of *Prajnaparadha* (intellectual error), which may lead to disease manifestation [5].

In the digital era, understanding screen-related health problems through Ayurvedic principles provides a holistic approach for prevention.

Aim

To critically analyze the impact of digital lifestyle and excessive screen exposure on health with special reference to Ayurvedic concepts of *Nidra* and *Manas*.

Objectives

1. To evaluate the health effects of excessive screen exposure.
2. To analyze Ayurvedic concepts related to sleep and mental health.
3. To correlate digital lifestyle disorders with Ayurvedic principles.
4. To review preventive and therapeutic Ayurvedic approaches.

2. Methodology of Literature Review

A narrative review was conducted using classical Ayurvedic texts and modern scientific literature.

Classical Sources Reviewed

- Charaka Samhita
- Sushruta Samhita
- Ashtanga Hridaya
- Bhava Prakasha
- Yoga texts

Modern Databases

Literature searched from:

- PubMed
- Scopus
- Web of Science
- Google Scholar

Keywords Used

“Screen time and health”

“Digital addiction”

“Sleep disturbance”

“Ayurveda Nidra”

“Manas and mental health”

Inclusion Criteria

- Studies related to screen exposure and health
- Research on sleep and mental health
- Ayurvedic references on lifestyle and mind

Exclusion Criteria

- Non-human studies without clinical relevance
- Articles unrelated to digital exposure

3. Concept of Health and Lifestyle in Ayurveda

Ayurveda describes health as a state of equilibrium involving:

- Dosha
- Dhatu
- Mala
- Agni
- Mental and sensory balance [6]

A healthy lifestyle requires appropriate:

- Food
- Sleep
- Activity
- Sensory regulation

Disturbance in daily routine (*Dinacharya*) leads to imbalance and disease.

4. Concept of *Nidra* in Ayurveda

Nidra is considered one of the three pillars of life (*Trayopastambha*) along with:

1. Ahara (food)
2. Nidra (sleep)
3. Brahmacharya (regulated lifestyle) [7]

Proper sleep provides:

- Physical strength
- Mental clarity
- Tissue nourishment
- Emotional stability

Functions of Proper Nidra

According to Ayurveda:

- Sukha (happiness)
- Pushti (nourishment)
- Bala (strength)
- Jnana (knowledge)
- Life span maintenance [7]

Effect of Improper Sleep

Loss of proper sleep may produce:

- Fatigue
- Poor concentration
- Irritability
- Reduced immunity

5. Concept of *Manas* (Mind)

Ayurveda considers *Manas* as an important factor controlling:

- Thought process
- Emotions
- Sensory coordination
- Decision-making [8]

Mental health depends on balance of:

- Satva
- Rajas
- Tamas

Digital Overstimulation and *Manas*

Excessive digital exposure may increase:

Rajas

Associated with:

- Restlessness
- Overactivity
- Continuous stimulation

Tamas

Associated with:

- Reduced motivation

- Inactivity
- Dullness

6. Modern Impact of Excessive Screen Time

6.1 Sleep Disturbance

Screen exposure before bedtime affects sleep through:

- Blue light-induced melatonin suppression
- Delayed circadian rhythm
- Psychological stimulation [9]

Consequences:

- Difficulty falling asleep
- Poor sleep quality
- Daytime fatigue

6.2 Psychological Effects

Excessive digital use has been associated with:

- Anxiety
- Depression symptoms
- Reduced emotional regulation [10]

6.3 Cognitive Effects

Long screen exposure may influence:

- Attention
- Memory
- Learning ability

especially in children and adolescents [11].

6.4 Physical Effects

Associated problems include:

- Neck pain
- Poor posture
- Obesity risk
- Digital eye strain [12]

7. Ayurvedic Correlation of Digital Lifestyle Disorders

The health effects associated with excessive digital exposure can be understood through Ayurvedic principles involving disturbance of *Dosha*, *Agni*, *Manas*, and *Nidra*.

7.1 Role of Vata Dosha

Vata governs:

- Movement
- Nervous system functions
- Sensory perception
- Mental activity

Excessive digital stimulation may aggravate *Vata* due to:

- Irregular routine
- Excessive mental activity
- Reduced rest
- Improper sleep

Possible manifestations:

- Anxiety
- Restlessness
- Insomnia
- Fatigue
- Poor concentration

7.2 Disturbance of Manovaha Srotas

Manovaha Srotas refers to channels associated with mental functions.

Digital overload may result in:

- Excessive sensory input
- Reduced mental relaxation
- Disturbed emotional processing

leading to *Manovaha Srotodushti*.

7.3 Asatmya Indriyarthasamyoga

Ayurveda describes inappropriate interaction between senses and their objects as *Asatmya Indriyarthasamyoga* [5].

Continuous exposure to:

- Bright screens
- Rapid visual content
- Digital stimulation

may represent excessive sensory engagement.

7.4 Prajnaparadha

Prajnaparadha refers to improper actions performed despite awareness of their harmful effects [5].

Examples:

- Using devices late at night despite sleep disturbance
- Excessive gaming/social media use
- Ignoring physical activity

8. Digital Lifestyle and Sleep Disorders

Modern sleep physiology is regulated by:

- Circadian rhythm
- Melatonin secretion
- Suprachiasmatic nucleus

Screen exposure at night delays melatonin release and alters sleep-wake cycles [9].

Ayurvedic interpretation:

Night is naturally dominated by *Kapha* and *Vata* phases supporting rest.

Improper night routine (*Ratri Jagarana*) aggravates *Vata* and reduces restorative sleep.

9. Digital Lifestyle and Mental Health

Excessive digital engagement may affect:

- Attention regulation
- Emotional balance
- Social behavior

Modern findings suggest association with:

- Anxiety symptoms
- Reduced psychological well-being
- Problematic internet use [10]

Ayurveda correlates mental disturbances with imbalance of:

- Rajas
- Tamas
- Manasika Dosh

10. Modern Management and Preventive Strategies

Management focuses on:

1. Digital hygiene
2. Behavioral modification
3. Sleep regulation
4. Psychological support

10.1 Screen Time Regulation

Recommendations include:

- Avoiding screens 1 hour before sleep
- Regular breaks during device use
- Limiting unnecessary digital exposure

10.2 Sleep Hygiene

Measures:

- Fixed sleep schedule
- Dark and quiet sleeping environment
- Avoidance of stimulants before bedtime

10.3 Behavioral Therapy

For problematic digital use:

- Cognitive Behavioral Therapy (CBT)
- Habit modification
- Mindfulness-based approaches

10.4 Management of Sleep Disorders

Melatonin

Used for circadian rhythm-related sleep disturbances.

Dose:

Adults:

1–5 mg at bedtime

Children:

0.5–3 mg depending on age and clinical assessment

Duration:

Short-term use according to physician guidance [13].

11. Ayurvedic Management

Ayurvedic management aims at:

- Restoring *Dinacharya*
- Balancing *Vata*
- Improving *Manas Bala*
- Enhancing quality of *Nidra*

Major approaches:

- Lifestyle correction
- *Abhyanga*
- *Nasya*
- Yoga
- Meditation
- *Medhya Rasayana*

11.1 Dinacharya (Daily Routine)

Recommended:

- Waking at proper time
- Regular meals
- Scheduled work and rest
- Reduced nighttime stimulation

Benefits:

- Maintains biological rhythm
- Supports mental stability

11.2 Abhyanga (Oil Massage)

Regular oil massage pacifies *Vata Dosha*.

Taila Used

Tila Taila (Sesame oil)

Dose:

External application

Duration:

15–20 minutes daily

Course:

4–8 weeks

Benefits:

- Promotes relaxation
- Improves sleep quality

Kshirabala Taila

Used traditionally for:

- Vata disorders
- Neuromuscular relaxation

Application:

Head and body massage

Duration:

15 minutes daily

11.3 Shiro Abhyanga

Oil application over scalp.

Useful for:

- Mental fatigue
- Stress
- Sleep disturbance

Duration:

10–15 minutes before bedtime

11.4 Nasya Therapy

Nasa hi Shiraso Dwaram [14]

Nasal administration supports functions of the head region.

Anu Taila Nasya

Dose:

2 drops per nostril

Frequency:

Daily

Duration:

Long-term preventive practice

Actions:

- Balances *Vata*
- Supports sensory function

11.5 Medhya Rasayana Therapy

Medhya Rasayana drugs support:

- Memory
- Intelligence
- Concentration
- Mental resilience

Brahmi (*Bacopa monnieri*)

Dose:

250–500 mg extract twice daily

Duration:

8–12 weeks

Effects:

- Improves cognition
- Supports memory [15]

Shankhapushpi (*Convolvulus pluricaulis*)

Dose:

3–5 g powder daily

Duration:

6–8 weeks

Effects:

- Supports mental calmness
- Improves attention

Mandukaparni (*Centella asiatica*)

Dose:

250–500 mg twice daily

Duration:

8 weeks

Effects:

- Neuroprotective
- Cognitive support [16]

Ashwagandha (*Withania somnifera*)

Dose:

250–500 mg extract daily

Duration:

8–12 weeks

Effects:

- Reduces stress response
- Improves sleep quality [17]

11.6 Nidra Supporting Measures

Recommended:

- Warm milk before bedtime
- Gentle oil massage
- Avoiding stimulating activities at night

12. Yoga and Meditation

Yoga influences:

- Autonomic balance
- Stress regulation
- Sleep quality

Practices:

- Pranayama

- Meditation
- Relaxation techniques

13. Comparative Understanding

Modern Concept	Ayurvedic Interpretation
Screen addiction	<i>Prajnaparadha</i>
Sensory overload	<i>Asatmya Indriyarthasamyoga</i>
Sleep disturbance	<i>Nidra Vikara</i>
Stress response	<i>Rajas Vriddhi</i>
Mental fatigue	<i>Manas Bala Kshaya</i>
Circadian imbalance	Disturbed <i>Dinacharya</i>

14. Research Gaps and Limitations

Although digital health effects are increasingly studied, several gaps remain:

1. Limited Ayurvedic clinical studies on digital lifestyle disorders
2. Lack of standardized assessment tools combining Ayurveda and modern parameters
3. Need for long-term studies evaluating *Medhya Rasayana*
4. Limited research on screen-induced *Manovaha Srotodushti*

Future studies should include:

- Sleep quality assessment
- Psychological scales
- Neurocognitive testing
- Biomarker evaluation

15. Future Perspectives

Future healthcare may focus on integrating:

- Digital wellness strategies
- Ayurvedic lifestyle principles
- Preventive mental healthcare

Possible research areas:

- Effect of *Dinacharya* on digital addiction
- Role of *Nasya* in stress-related disorders
- Clinical evaluation of *Medhya Rasayana*
- Personalized lifestyle correction based on *Prakriti*

16. Conclusion

Digital lifestyle has significantly influenced modern health by altering sleep patterns, sensory exposure, mental activity, and daily routines. Excessive screen time is associated with sleep disturbance, cognitive changes, psychological stress, and reduced physical well-being. Ayurveda provides a comprehensive framework through the concepts of *Nidra*, *Manas*, *Dinacharya*, *Asatmya Indriyarthasamyoga*, and *Prajnaparadha*. Disturbance caused by excessive digital exposure may be understood through imbalance of *Vata Dosha*, impairment of *Manovaha Srotas*, and reduced mental stability. Ayurvedic interventions including lifestyle regulation, *Abhyanga*, *Nasya*, yoga, meditation, and *Medhya Rasayana* may serve as supportive approaches for maintaining health in the digital era. Scientific validation through well-designed clinical research is required to establish evidence-based protocols.

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