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Oksana VOLOSHYNA

*PhD Candidate, Department of Psychology, Ivan Franko National University of Lviv,
Public Organization “Institute for Sleep Disorders and Psychotrauma”, Sleep
Laboratory, Medical Center “Ehokor”, Private Enterprise “Oksana Voloshyna’s Center
for Somnotherapy” (Lviv, Ukraine)*

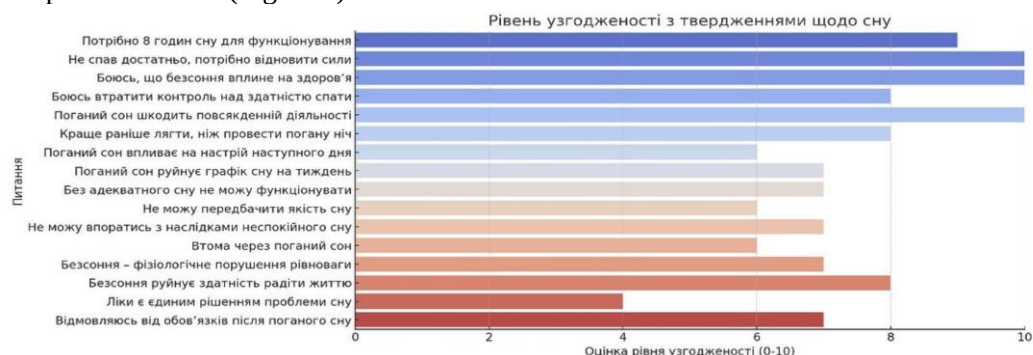
“MIS” AS THERAPEUTIC SLEEP: AN INNOVATIVE APPROACH TO SLEEP DISORDERS AND RECOVERY FROM STRESS AND TRAUMA

Abstract. In modern sleep medicine, neuropsychology of sleep, and psychotraumatology, increasing attention is being given to methods that promote deep nervous system recovery without pharmacological intervention. Sleep is critically important for regulating the psycho-emotional state, neuroplasticity, and adaptation to stress (Walker, 2017). Patients with post-traumatic stress disorder (PTSD), trauma-associated sleep disorders (TASD), and combat insomnia experience disturbances in rapid eye movement (REM) sleep, which impairs the natural process of memory integration and nervous system restoration (Van der Kolk, 2014).

The Integrative Somnotherapy Method (MIS) is a unique technology that models natural sleep mechanisms in a conscious state, providing therapeutic effects for patients with PTSD, sleep disorders, trauma-related sleep disturbances, nightmares, chronic stress, pain syndromes, medical conditions, and other clinical concerns. Research indicates that active engagement with resource memory and neuroplastic mechanisms of the brain facilitates profound restructuring of traumatic reactions without deep immersion in traumatic memories or the risk of retraumatization.

Keywords: Integrative Somnotherapy Method (MIS), therapeutic sleep, combat insomnia, trauma-associated sleep disorders (TASD), nightmares, quality of life, questionnaire analysis

Introduction. An analysis of sleep-related questionnaire data is presented in the form of a graph, illustrating respondents’ agreement with statements about the impact of sleep on their lives (Figure 1).



(Figure. 1)

Findings:

- The highest scores were given to statements regarding the importance of 8 hours of sleep, recovery from sleep deprivation, and fears of negative consequences of insomnia.
- High scores were also noted for concerns about sleep control and the impact of poor sleep on daily functioning.
- The lowest level of agreement was recorded for statements suggesting the necessity of medication to manage sleep problems.

The Integrative Somnotherapy Method (MIS) proposes a unique approach to treating sleep disorders, trauma-related disorders, stress, pain, and various medical conditions by recreating the natural sleep mechanism in a conscious or semi-conscious state. This allows for the activation of the same neuroplastic processes occurring during NREM and REM sleep phases but within a controlled therapeutic setting.

Methods and Mechanisms

MIS is based on the following scientific principles:

1. Polyvagal Theory (Porges, 2011): Activation of the parasympathetic nervous system through extended breathing regulates stress levels and induces a state of safety.
2. Neuropsychology of Trauma (Van der Kolk, 2014): MIS enables the brain to complete the trauma cycle using the same mechanisms activated during REM sleep, without requiring re-experiencing trauma.
3. Somatic Memory Processing (Levine, 1997): Integration of bodily sensations in therapy facilitates the transformation of trauma-associated physiological responses.
4. Imagery and Visualization Therapy (Holmes et al., 2005): Engaging with internal imagery and metaphors enhances sensory integration and fosters the development of new resource-based memory.
5. Hypnotherapy: In MIS, hypnotherapy is used to simulate the sleep-onset state, allowing individuals to transition into relaxation and reduced conscious control. However, unlike classical hypnosis, the patient's consciousness remains in an observer mode, enabling the integration of resourceful processes.

During MIS sessions, patients enter a state of deep physiological relaxation, similar to the initial stages of sleep. Eye movement activation (similar to REM phase) and micro-dissociative states facilitate the brain's natural integration of traumatic experiences in a safe mode.

Clinical Cases:

Case 1: Military Personnel with T ASD (Trauma-Associated Sleep Disorders)

Patient: 35-year-old former prisoner of war diagnosed with combat insomnia, PTSD-related sleep disorder, and recurrent nightmares.

Symptoms:

- Frequent awakenings, fear of falling asleep (sleep perceived as a life-threatening state—signs of combat insomnia), PTSD-related nightmares, difficulty waking up, chronic fatigue, headaches.
- GAD-7 anxiety test: High anxiety level (18).
- Nightmares: 7 times per week, frequent awakenings (hourly), high tension levels (10/10).
- **Quality of life (WHO-5 well-being index): Low life satisfaction and emotional comfort (5).**

- PHQ-9 Depression Screening: 15–19 points—high depression level (18).

Therapeutic Process:

MIS was applied over 10 sessions, focusing on resource-oriented therapy and neuroadaptation via therapeutic sleep mechanisms.

Results:

- Improved sleep duration: From 2–3 hours per night to 6–7 hours.
- Reduction in nightmare frequency: From 7 times per week to 1 time per week.
- Stabilization of anxiety levels: From 15 to 2.
- **WHO-5 well-being index: Increased to 19 points (moderate well-being).**
- PHQ-9 Depression Screening: Reduced to 4 (minimal depression).

Case 2: Oncology Patient with Chronic Insomnia:

Patient: 55-year-old university lecturer, oncology patient in remission, experiencing claustrophobia and nocturnal panic attacks.

Symptoms:

- Prolonged sleep onset (3–4 hours), frequent awakenings, high anxiety about health condition.
- GAD-7 anxiety test: High anxiety level (20).
- **WHO-5 well-being index: Low life satisfaction and emotional comfort (2).**
- PHQ-9 Depression Screening: 18 points—high depression level.

Therapeutic Process:

MIS was applied, focusing on somatic sensations, fear regulation, and neuroplasticity mechanisms.

Results:

- Reduced sleep onset latency: From 3–4 hours to 30 minutes.
- Reduced nighttime awakenings: From 7–8 per night to 1–2 per night.
- Reduced anxiety levels: From 9/10 to 3/10.
- PHQ-9 Depression Screening: Reduced to 4 (minimal depression or absence of symptoms).
- GAD-7 Anxiety Test: Reduced to 3 (minimal anxiety or absence of symptoms).
- **WHO-5 well-being index: Increased to 9 (moderate well-being).**

Discussion

Key Advantages of MIS

1. No Need for Verbalization:

MIS is particularly valuable for military personnel, as it does not require verbalizing traumatic events, which could risk retraumatization or breach confidentiality related to state or military secrecy. The brain naturally integrates these experiences in a secure mode.

2. Use of Hypnotherapy for Sleep State Simulation in MIS:

Unlike classical hypnosis, MIS employs hypnotherapy not for suggestion or trance induction, but as a means to facilitate natural self-regulation. The transition into a sleep-like state enhances neuroplasticity, integrates sensory experiences, and enables the formation of new resource-based memory networks.

Conclusions

The Integrative Somnotherapy Method (MIS) is an innovative approach that replicates sleep mechanisms for therapeutic recovery. Its effectiveness in PTSD, chronic stress, sleep disorders, pain, and medical conditions is grounded in natural

neurophysiological processes that integrate trauma reactions without retraumatization. MIS challenges traditional treatment paradigms and introduces a new level of therapy based on the brain's inherent mechanisms.

Invitation to Collaboration

MIS demonstrates unique results in sleep recovery, trauma therapy, and pain management. However, global clinical studies are needed to validate its effectiveness. We invite international researchers and medical professionals to collaborate in conducting further research and integrating MIS into sleep medicine, neuropsychology, and psychotraumatology.

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