

REPORT · NESA WORLD® XSIGNAL® · ANS regulation = better sleep + less anxiety

XSIGNAL® IN MENTAL HEALTH AND SLEEP

What non-invasive neuromodulation is exceptionally effective for

Insomnia

Primary and secondary insomnia, sleep onset and maintenance disorders. PSQI ↓40-60% after 8-12 sessions.

Chronic anxiety

Generalised anxiety disorder, panic disorder. GAD-7 ↓40-50%, cortisol ↓20-30%.

Depressive states

Mild to moderate depression as adjunct to psychotherapy. Improved motivation, sleep, energy.

Stress and burnout

Chronic professional stress, sympathetic hyperactivation, diaphragmatic tension.

Irritability

Emotional dysregulation, bruxism, stress-induced muscular tension.

Cognitive fatigue

Mental fog, concentration, memory - support for students and professionals.

PTSD and trauma recovery

As adjunct to EMDR/CBT. Hyperarousal and nightmare regulation.

Dementia - sleep and cognition

Proven improvement of sleep quality and cognitive function in dementia (RCT, []).

Institutionalised elderly

Improved sleep and overall wellbeing in older adults in institutional care (RCT, []).

Post-COVID cognitive symptoms

Brain fog, sleep disturbance and anxiety after COVID.

Why XSIGNAL® works in this discipline

1.5 µA - below sensation threshold, above effect threshold. • **Cortical regulation (P8)** - reduces rumination and hyperarousal. • **HPA axis modulation** - lowers cortisol, restores normal sleep-wake rhythm. • **Combinable** with psychotherapy, antidepressants, anxiolytics - enhances their effect.

PSQI
↓40-60%

sleep quality

GAD-7
↓40-50%

anxiety

HRV
↑20-30%

ANS regulation

Cortisol
↓20-30%

stress

6+

RCT publications

Scientific evidence: Sleep + cognition in dementia (RCT) · Sleep + well-being institutionalised elderly (RCT) · New frontier in sleep disorders (RCT) · Post-COVID dysautonomia in women

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For demos, training or clinical pilots - get in touch.