rTMS treatment for diverse mental and neurological disorders. Therapeutic alternatives such as rTMS are urgently needed because treatment resistance is very common in psychiatric and neurological disorders. Based on neurophysiological findings, noninvasive brain stimulation methods offer an integrative treatment approach for many brain disorders. Therefore, this report presents an overview of the recent literature on the efficacy of rTMS and the treatment of various brain disorders, focusing on anxiety disorders, borderline personality disorder, eating disorders, and some neurological disorders such as multiple sclerosis and neuropathic pain. Overall, although the evidence base suggests that neuromodulation approaches are therapeutically promising, safe, and well-tolerated for many disorders, there are still gaps in the knowledge base. This report aims to present a practical guide for clinical application based on evidence from the literature and clinical experience in the field.

Key words: *transcranial magnetic stimulation - psychiatric disorders - comorbidity*

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ELECTROSTIMULATIVE THERAPY (EST) – TROUBLESHOOTING AND TIPS FOR CLINICAL PRACTICE – EXPERIENCE FROM PSYCHIATRIC CLINIC, CLINICAL HOSPITAL CENTRE OSIJEK (CROATIA)

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Often taken for granted and as an simple or even somewhat primitive tretment method, modern day EST represents a significant challenge for the clinician performing it. EST has evidence-based practice grounds which stand for a gold standard, but when giving EST the practicioner quickly confronts the clinical reality where evidence-base is limited and there are many areas where there is marked varitations in clinical practice. Given our, relatively short-lived clinical experience, the lightmotive is comprised in an imperative that EST practicioners have a sound understanding of evidence base that underpins EST but it is also important to have the capacity to integrate this knowledge into own clinical practice. This way, we ensure development of varied consumet-focused, practice-based which guide the delivery of EST treatment. As above mentioned, we will show and highlight the steps in performing EST among patients from different diagnostic categories, how to deal with public stigma, how to establish a team for the treatment, different ways in delivering treatment (with/without titration, electrode placement, preparation of electrodes and skin, which pulse and how to deliver, how to monitor/should we monitor etc.) what to do/react when some of these steps or treatment fails.

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DIFFERENCES IN EFFICACY OF H1-COIL AND 8-COIL HR rTMS ON DIFFERENT DIMENSIONS OF MAJOR DEPRESSIVE DISORDER: POOLED SAMPLE FROM 2016-2022 STUDIES IN PSYCHIATRIC CLINIC SVETI IVAN

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Objectives: To compare the efficacy of HR rTMS with H1-coil and 8-coil on different dimension of major depressive disorder.

Methods: We conducted this analysis in intention-to-treat population of the pooled sample from two prospective cohort and two randomized controlled trials conducted in Psychiatric Clinic Sveti Ivan during 2016-2022. The outcome was Hamilton Depression Rating Scale-17 (HDRS-17). Allocation was concealed and outcome assessment was blinded. We conducted the analysis using adjusted within-between subject analysis of covariance. We controlled confounding effects of age, gender, diagnosis, duration of MDD and patients age at MDD onset. Using confirmatory factor analysis we tested the HDRS-17-part of the five-dimensions model derived by Uher (2012). We performed all interventions at 120% of the motor threshold, H1-coil with frequency of 18 Hz and 8-coil with 10 Hz, all in one session daily during 20 workdays (Figure 1).

Table 1. Characteristics of participants, ITT population

	H1-coil (n=125)	8-coil (n=107)
Sociodemographic characteristics		
Age (years), median (IQR)	54 (44; 60)	52 (43; 61)
Gender, n (%)		
men	56 (44.8)	52 (48.6)
women	69 (55.2)	55 (51.4)
Clinical characteristics		
Diagnosis, n (%)		
depressive episode (F32)	35 (28.0)	34 (31.8)
recurrent MDD (F33)	90 (72.0)	73 (68.2)
Duration of MDD (years), median (IQR)	9 (4; 17)	7 (3; 16)
Age at onset, median (IQR)	41 (27; 50)	42 (34; 51)
Psychiatric comorbidities, n (%)	59 (52.2)	73 (73.7)
Number of psychiatric comorbidities, mean (SD)	1.9 (1.0)	2.8 (1.2)
Neurotic, stress-related and somatoform disorders (F40-F48), n (%)	33 (26.4)	30 (28.0)
Disorders of adult personality and behaviour (F60-F69), n (%)	22 (17.6)	26 (24.3)
Organic mental disorders (F00-F09), n (%)	6 (4.8)	42 (39.3)
Mental and behavioural disorders due to psychoactive substance use (F10-F19), n (%)	10 (8.0)	10 (9.3)
Schizophrenia, schizotypal and delusional disorders (F20-F29), n (%)	6 (4.8)	2 (1.9)
Other psychiatric diagnosis*, n (%)	5 (4.0)	3 (2.8)
Severity of MDD symptoms at baseline		
HDRS-17 at baseline, median (IQR)	19 (15; 23)	17 (13; 20)
HDRS-17 at baseline, n (%)		
mild (≤13)	27 (23.7)	29 (29.0)
moderate (14-18)	28 (24.6)	34 (34.0)
severe (19-22)	30 (26.3)	20 (20.0)
very severe (≥ 23)	29 (25.4)	17 (17.0)

Abbreviations: ITT - intention-to-treat; IQR - interquartile range; MDD - major depressive disorder; SD - standard deviation; HDRS-17 - Hamilton Depression Rating Scale-17

* Other psychiatric diagnosis: Behavioural syndromes associated with physiological disturbances and physical factors (F50-F59), Intentional self-harm by sharp object (X78), Other problems related to primary support group, including family circumstances (Z63), Problems related to employment and unemployment (Z56)