# PHYSIOTHERAPEUTIC APPROACHES FOR MULTIPLE SCLEROSIS-RELATED SEXUAL DYSFUNCTIONS: A SCOPING REVIEW OF CLINICAL TRIALS

Reimus M<sub>1</sub>, Wojtas J<sub>2</sub>, Szczyrba S<sub>3</sub>, Sieminski M<sub>4</sub>

- 1. Emergency Department, University Clinical Centre, 80-214 Gdańsk, Poland.,
- 2. Department of Gynecology, Obstetrics and Neonatology, Medical University of Gdańsk, Smoluchowskiego 17, 80-214 Gdańsk, Poland.,
- 3. Department of Adult Neurology, University Clinical Center in Gdańsk, Gdansk, Poland.,
- 4. Department of Emergency Medicine, Medical University of Gdansk, 80-210 Gdansk, Poland







## INTRODUCTION

Multiple Sclerosis (MS) is a chronic autoimmune disease affecting the central nervous system, diagnosed in young adults and more prevalent in women. Beyond motor and cognitive impairments, MS frequently leads to sexual dysfunction, significantly impacting patients' quality of life. Despite growing awareness of the psychosocial burden of MS, sexual health remains underaddressed in clinical practice. Physiotherapy offers promising, nonpharmacological strategies dysfunction, manage sexual pelvic floor particularly through rehabilitation. However, evidence regarding its efficacy in MS remains limited. This review aims to explore the current state of research on physiotherapeutic interventions for sexual dysfunction in individuals with MS.

## **AIM**

Sexual dysfunction affects 42% to 73% of individuals with MS and may be primary (neurological), secondary (related to symptoms), physical or tertiary (emotional and psychosocial factors). physiotherapy Although demonstrated benefits in addressing sexual dysfunction, its application in MS patients remains understudied. This review aimed to identify randomized controlled trials (RCTs) evaluating the effectiveness of physiotherapeutic interventions in this population.

## to MATERIALS AND METHODS

A literature search was conducted in PubMed and Google Scholar. Only RCTs involving MS patients with sexual dysfunction were included. Key aspects analyzed included intervention types, sample sizes, control mechanisms, and treatment outcomes.

#### **RESULTS**

Six RCTs met the inclusion criteria, primarily involving female MS patients. The interventions included:

- Pelvic Floor Muscle Training (PFMT)
- Tibial Nerve Stimulation (TNS)
- Clitoral vacuum/vibration therapy
- Telerehabilitation
- Combinations with mindfulness techniques

All studies demonstrated significant improvements in sexual satisfaction, sphincter control, and sensory perception during intercourse. The most notable outcomes were seen in protocols combining PFMT with mindfulness. The Female Sexual Function Index (FSFI) was commonly used to assess treatment efficacy.

#### **CONCLUSIONS**

- 1. Sexual dysfunction is common among individuals with Multiple Sclerosis and significantly affects quality of life.
- 2. Physiotherapeutic interventions, particularly Pelvic Floor Muscle Training, Tibial Nerve Stimulation and telerehabilitation; show promising results in improving sexual function.
- 3.The combination of PFMT with mindfulness techniques yielded the most significant improvements in clinical trials.
- 4. Despite positive findings, the number of high-quality RCTs remains limited.
- 5. Further research is needed with larger sample sizes and diverse physiotherapeutic approaches to confirm long-term effectiveness.
- 6.Incorporating pelvic floor physiotherapy into standard MS care could enhance holistic treatment and patient outcomes.



## TAKE-HOME MESSAGE

Pelvic floor physical therapy should be an integral component of multidisciplinary care in MS. Addressing sexual dysfunction through evidence-based physiotherapeutic approaches can greatly enhance patients' quality of life and overall treatment outcomes.