

Title: The DMSG-COACHES: An Easily Accessible E-Learning Platform for Digital Lifestyle Interventions Supporting People with Multiple Sclerosis

Authors: Stephanie Woschek¹, Marie-Helen Geißelbrecht¹, Caroline Mehr¹ & Herbert Temmes¹

Affiliation: ¹German Multiple Sclerosis Society (DMSG)

Background: Recent German S2 guidelines for Multiple Sclerosis (MS) include lifestyle factors as a dedicated chapter, emphasising their therapeutic importance alongside disease-modifying therapies. Growing evidence demonstrates that modifiable lifestyle factors significantly impact MS progression and outcomes: regular exercise reduces inflammatory markers, improves fatigue, mobility, and cognitive function; anti-inflammatory dietary patterns (Mediterranean diet) may reduce relapse rates and brain atrophy; stress management techniques decrease cortisol levels and neuroinflammation. Key lifestyle factors with proven MS impact include physical exercise, nutrition, stress management, smoking cessation, weight management, and adequate sleep. Despite robust evidence supporting these lifestyle interventions in MS, a significant gap persists between theoretical knowledge and practical implementation in daily life.

Objective: The DMSG-COACHES bridge the evidence-practice gap through innovative digital coaching programmes providing accessible, evidence-based lifestyle interventions for people with MS.

Methods: Since 2022, DMSG has developed several DMSG-COACHES on an e-learning platform with free access for people with MS, trainers and therapists. Production of individual coaches was funded through targeted project grants from kkh – Kaufmännische Krankenkasse (A German health insurance company). These comprehensive digital coaches translate theoretical evidence-based knowledge into practical digital courses: The Exercise Coach (evidence-based exercise programmes with individualised training principles), The Nutrition Coach (anti-inflammatory dietary interventions with practical recipes), and The Relax Coach (stress management techniques including yoga, progressive muscle relaxation, qigong, and autogenic training). Currently, we are programming The Pelvic Floor Muscles Coach and planning The Fatigue Coach. Additional coaches are in development. All programmes are designed as self-paced, asynchronous online interventions accommodating fluctuating MS symptoms.

Results and Conclusions: Digital coaching platforms enable barrier-free access regardless of geographic location, mobility limitations, or symptom variability. Participants engage flexibly with evidence-based content, promoting self-efficacy and autonomous health management whilst addressing key lifestyle domains identified in current guidelines.

Words: 289 words

*The DMSG-COACHES The Exercise Coach, The Nutrition Coach, The Relax Coach, and The Pelvic Floor Muscles Coach has been funded by the kkh – Kaufmännische Krankenkasse (A German health insurance company).

**No conflicts of interest.