

NAVIGATING PAIN AND EXERCISE: A QUALITATIVE STUDY OF MULTIPLE SCLEROSIS HOME PRACTICES

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BACKGROUND

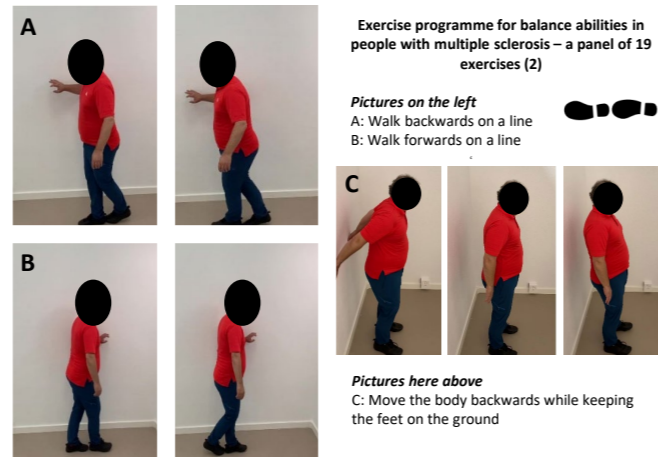
Multiple sclerosis (MS) is characterized by various symptoms, including pain, which significantly affects patients' quality of life and psychological well-being (1).

This **qualitative study** explores how these symptoms influence the practice and engagement in **home-based exercises in individuals with MS**. Despite not initially focusing on pain, it emerged prominently in participant narratives.

As **practices evolve towards greater patient autonomy** in managing their treatment, gaining an **understanding of the relationship between pain and home-based exercises programs** is informative for healthcare professionals. This knowledge aids in the development of more effective, patient-tailored exercise regimens.

AIMS

This research aims to **shed light on the challenges patients face in adhering** to prescribed **home exercises** and identifies **strategies implemented to overcome these obstacles**.



METHODS

Participants: 18 individuals with MS (13 women & 5 men; age: 53±11 years)

Living arrangements: 10 living with a partner, 8 living alone

Employment status: 6 part-time, 12 unemployed

Interview details:

36 semi-structured interviews (each participant interviewed twice)

Initial interview two weeks after exercise proposal; follow-up three months later

- **Initial interview:** initial reactions and experiences with the exercises
- **Follow-up interview:** adherence, long-term effects, and revisited obstacles and facilitators to exercises.

Physiotherapist collaboration : tailored exercises (4-5 exercises per patient)

The **interviews**, transcribed verbatim, were analyzed using **thematic analysis** to identify **key patterns and themes** in the data.

References

(1) Finlayson M. Multiple sclerosis rehabilitation. From impairment to participation. Boca Raton, USA: CRC Press; 2013. 603 p.

(2) Sattelmayer KM, Chevalley O, Kool J, Wiskerke E, Denkinger LN, Giacomino K, Opsommer E, and Hilfiker R. Development of an exercise programme for balance abilities in people with multiple sclerosis: a development of concept study using Rasch analysis. Archives of Physiotherapy. 2021;11(1):29

KEY FINDINGS

Pain as a primary concern:

Emerged as a significant factor, although not the initial focus of the research. Frequently led to medical consultations and was a diagnostic trigger for MS in seven cases.

Prevalence and Location of Pain:

Almost all patients reported current pain, predominantly in the back and legs (10 each), followed by the head and arms (3 each), and diffuse pain (5 patients). Accompanying symptoms included tingling (3 patients), sometimes linked to medication side effects.

Impact on Exercise (see extracts here below):

Fear of exacerbating pain or injury led to considerable exercise avoidance. Despite fears, some exercises were found to alleviate pain, suggesting a complex relationship between activity and pain management.

Role of Physiotherapy (see extracts here below):

Crucial in tailoring treatments to individual pain profiles and encouraging exercise participation

Impact on Exercise

Patient 5 (Jeanne, 57 yrs.): “With the leg pain, I don't even try that exercise because I'm too afraid of falling”.

Patient 11 (Céline, 78yrs.): “Fear of falling while doing the exercises, but that doesn't stop me from doing them. I adapt them”

Patient 16 (Sonia, 42 yrs.): “But I don't like, when I'm alone because I'm afraid of losing my balance. So, I don't necessarily do it when I'm alone in the morning or... Sometimes, the idea is to not hurt myself. (...) Yes, I'm always a bit afraid of falling or...”

Role of physiotherapist

Patient 18 (Gerald, 52yrs.): “My physio... maintain muscle strength as best as possible, certainly recover some things..., be there, especially in case of pain, manage these neuropathies, spasticity, things like that, teach me exercises that I can do... each time, I learn something”

Patient 5: “because he checks in on my progress from time to time, thanks to my physiotherapist, I keep going and sometimes, he motivates me, he says: Oh no, keep doing these exercises! He has an encouraging side, and he provides structure. So, he motivates me. I think it would have been difficult on my own.”

CONCLUSION

Pain emerged as a **central theme**, significantly **impacting exercise adherence** among patients with MS. While **fear of pain** led to exercise avoidance, specific exercises alleviated pain, highlighting the **importance of tailored exercise regimens**. Results support a personalized physiotherapy **approach that adapts exercises to individual pain profiles to improve adherence**. Emphasize pain management in exercise therapy to potentially enhance quality of life and treatment outcomes for MS patients.

RELEVANCE FOR PATIENT CARE

- ✓ Pain significantly impacts exercise adherence among patients with MS.
- ✓ Fear of worsening pain or injury can deter exercise participation.
- ✓ Tailored exercises can alleviate pain and are crucial for effective treatment.
- ✓ Open dialogue between physiotherapists and patients is essential to address concerns.
- ✓ Personalized exercise programs enhance care by balancing pain management and therapeutic benefits.

Ethical permissions: The study was approved by the local ethic committee in Switzerland (CER-VD 2021-01238) and was conducted according to principles stated in the Declaration of Helsinki. All participants signed a written informed consent.