

An Outpatient Rehabilitation Programme for People with Multiple Sclerosis: A Pilot Study

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BACKGROUND

People with multiple sclerosis (MS) have significant challenges in accessing specialised outpatient rehabilitation. There is still a need for evidence based background to establish non-pharmacological treatment as an important component of MS care. This pilot study evaluated a multidisciplinary outpatient programme developed to address motor recovery, psychosocial wellbeing, and nutritional self-management in people with MS.

RESULTS

Statistically significant improvements were found in 8 of 10 outcomes after the two-month intensive phase. The greatest effects were observed in gait coordination ($p<0.001$), impact of MS on daily life ($p<0.001$), balance confidence ($p=0.018$), and fine motor function of the dominant hand ($p=0.006$). No significant change was detected in fatigue or walking speed.



Pic1 - Therapy documentation

METHODS

Twenty five participants (mean age 50 years, 80% female, mean Expanded Disability Status Scale score 4.3) were enrolled in a four-month programme including individual physiotherapy, group physiotherapy, supportive group psychotherapy, and nutritional recommendation. Seven validated outcome measures were used to assess gait, fine motor skills, cognitive functions, balance confidence, and the impact of MS on daily life and fatigue. Paired t-tests with multiple comparison correction were applied.

CONCLUSION

Intensive multidisciplinary programme can bring clinical improvements in motor, cognitive, and quality - of - life aspects in people with MS. These findings can support implementation of this model as an essential component of standard MS care.

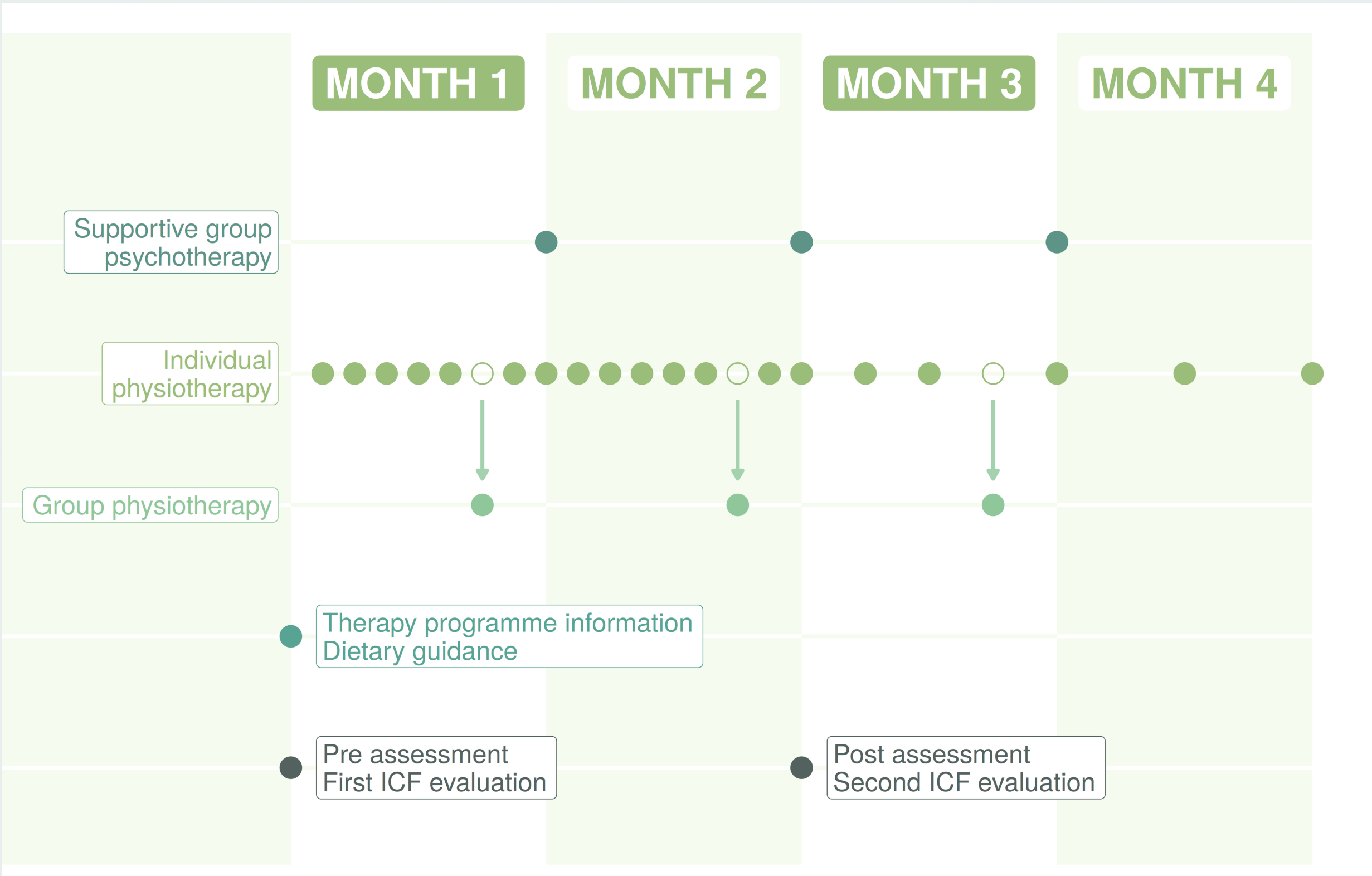


Fig.1 - Time schedule of the therapeutic programme, ICF - International Classification of Functioning, Disability and Health

	Median	Pre-treatment	Post-treatment (N = 20)	Change
MFIS [points]	35.0	34.0	-2.5	
SDMT [count]	39.5	43.5	+4.0	*
ABC [%]	61.2	68.4	+6.6	*
9HPT R [s]	25.5	25.4	-1.5	*
9HPT L [s]	27.6	24.8	-2.0	**
2MWT [m]	118.0	130.0	+4.8	
FSST [s]	19.1	12.3	-2.6	***
MSIS-29 [%]	28.6	20.3	-6.6	***
MSIS-29 Physical [%]	29.0	24.0	-7.0	**
MSIS-29 Psych. [%]	25.6	16.7	-6.7	***

Target domains: Body functions, Mobility, Quality of life

*** $p < 0.001$ / ** $p < 0.01$ / * $p < 0.05$

Fig.2 - Results, change after 2 month intensive phase, MFIS-Multiple Fatigue Impact Scale, SDMT - Symbol Digit Modalities Test, ABC - Activities-specific Balance Confidence Scale 9HPT - 9-Hole Peg Test, R - right hand, L - left hand, 2MWT - The Two Minute Walk Test, FSST - The Four Square Step Test, MSIS-29 - Multiple Sclerosis Impact Scale

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