

## PHYSICAL REHABILITATION AND LIFE QUALITY IN MULTIPLE SCLEROSIS

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### ABSTRACT

Multiple sclerosis (MS) is a chronic inflammatory and degenerative disease of young people, which affects life quality, with social and psychological effects.

The new era of treatments in MS, with drugs influencing immunomodulatory systems made possible a new approach of these patients, in efforts to make them capable to perform their activities as much as possible. Physical rehabilitation is an important mean for making patients with MS to accept their disease and to favourise their independence longer time. Patients should be encouraged to perform daily, or at least 2-3 times a week, a programme of physical exercises under the supervision of a specialist. Performing exercises in MS leads to a lot of benefits, not only physical ones, but also psychological ones and for overall health and finally to quality of life improvement. Physical therapy should be combined with psychological support, for limitation of negative impact of a chronic disease in young people. We must not forget that depression, anxiety, and in late stages of the disease, cognitive decline can interfere with life quality, so it is necessary to manage in a correct way all these aspects.

**Key words:** multiple sclerosis, treatment, rehabilitation

*“Treatments for multiple sclerosis seem to be couched in terms of percentage reduction of attacks or exacerbations, not in terms of making things better ...”*

*“I realize that physical therapy has actually made things better for me. I must express my gratitude for your decision to prescribe physical therapy for me, and particularly recommending Ability Rehabilitation Specialists.”*

Michael N.

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The new era of treatments in MS, with drugs influencing immunomodulatory systems made possible a new approach of these patients, in efforts to make them capable to perform their activities as much as possible.

Physical rehabilitation is an important mean of making patients with MS to accept their disease and to favourise their independence longer time.

One of the primary aims of rehabilitation in people with MS is to maintain and improve functional independence. Review studies suggest that exercise therapy may be beneficial for patients with MS in terms of physical fitness, activities of daily living, and outcomes related to mood. In particular, aerobic exercise seems to be a promising rehabilitative tool for patients with MS because it could positively affect both maximum exercise capacity and daily physical activities.

Patients should be encouraged to perform daily, or at least 2-3 times a week, a programme of physical exercises under the supervision of a specialist. (Petajan et al, 2007)

Performing exercises in MS leads to a lot of benefits, not only physical ones, but also psychological ones and for overall health and finally to life quality improvement. (1)

Regular exercises have different benefits for people with MS, because they:

- Are helpful in managing several symptoms
- Help to maintain functional ability
- Are important for psychological well-being
- Complement the effects of drug treatments

### Physical benefits

- Muscle function can be maintained and increased by resistance training, and people with MS are capable to make favourable improvements in limb muscle strength or endurance using standardised resistance training programmes.
- Preventing bone osteoporosis
- Maintaining weight control
- Maintaining or improving muscle/joint flexibility

### Psychological benefits

Regular exercise helps to reinforce self-esteem, strengthens self-efficacy, is enjoyable, is valuable in keeping up the spirits and may lead to so-called flow-experiences in which the sense of time disappears in a highly positive manner.

Outcome expectancies and perceived benefits of exercise are psychological issues known to affect exercise adherence significantly.

### Benefits for overall health

Maintain health and protects against common chronic diseases such as hypertension, coronary heart disease or type 2 diabetes.

Exercise could be a promising strategy to activate brain repair mechanisms and could be a potent protective factor for cognitive decline in people with MS. (2)

### Benefits for life quality

- Participation in exercise has a positive impact on health-related life quality in people with MS.
- Exercise programmes have frequently led to improvements in vitality or social functioning.
- Exercise in groups, not alone, most likely induces positive changes on life quality in people with MS.

In addition, the type of exercise may have an influence, aerobic endurance exercise is more suitable for improving life quality than resistance training.

### Rehabilitation

A rehabilitation program for people with MS is designed to meet the needs of the individual patient,

depending upon the type and severity of the symptoms and the amount of impairment. Active involvement of the patient and family is vital to the success of the program.

The goal of MS rehabilitation is to help the patient return to the highest level of function and independence possible, while improving the overall quality of life - physically, emotionally, and socially. (3)

In order to help reach these goals, MS rehabilitation programs may include the following:

- exercises and activities to help improve motor skills, restore activities of daily living (ADLs), and help the patient reach maximum independence
- exercises that promote muscle strength, endurance, and control
- management of bowel or bladder control
- use of assistive devices such as canes, braces, walkers
- methods to improve communication skills for patients who have difficulty speaking
- cognitive retraining
- vocational counseling
- adapting the home environment for ease of function, safety, accessibility, and mobility
- patient and family education

### Rehabilitation team

Rehabilitation programs for patients with MS can be conducted on an inpatient or outpatient basis. (4) Many skilled professionals are part of the rehabilitation team, including any/all of the following:

- neurologist
- physiatrist
- internist and other specialists
- rehabilitation nurse
- dietitian
- physical therapist
- speech/language therapist
- occupational therapist
- audiologist
- social worker
- psychologist/psychiatrist
- recreational therapist
- case manager
- chaplain
- vocational counselor

### Physical therapy

Physical therapy cannot cure the primary symptoms of MS (such as weakness, tremors, tingling, numbness, loss of balance, vision impairment,

paralysis, and bladder or bowel dysfunction), but therapy can enable the patient to compensate for the changes brought about by MS. These “compensatory treatments,” as they’re called, include learning about new movement techniques, strategies, and equipment. (5)

Physical therapy can also be very helpful at lessening and even stopping secondary symptoms of MS. A physical therapist can teach the patient exercises to strengthen and loosen muscles. Many of these exercises can be performed at home. The goal of physical therapy is to improve independence and quality of life by improving movement and function and relieving pain. (6)

Physical therapy can help with:

- Balance problems
- Lack of coordination
- Fatigue
- Pain
- Immobility
- Weakness

Physical therapy should be combined with psychological support, for limitation of negative impact of a chronic disease in young people. We must not forget that depression, anxiety, and in late stages of the disease, cognitive decline can interfere

with quality of life, so it is necessary to manage in a correct way all these aspects.

## CONCLUSIONS

- Benefits associated with regular exercise contribute greatly to the well-being of people with MS.
- Exercise should be seen as one of the key elements of self-management in the condition.
- There are many good reasons why exercise is suitable and can be recommended for people with MS.

### Exercise in MS:

- Is effective in improving/maintaining a number of aspects of physical, mental and overall health.
- Enhances quality of life, especially when conducted in groups.
- May prevent functional decline in the long-term evolution.
- Is safe, and the advantages far outweigh the drawbacks.
- Leads to maximum benefits when performed regularly.
- Is variable and enjoyable.

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