

Psychological well-being and perception of disease severity in people with multiple sclerosis, who underwent a program of self-regulation to promote physical activity

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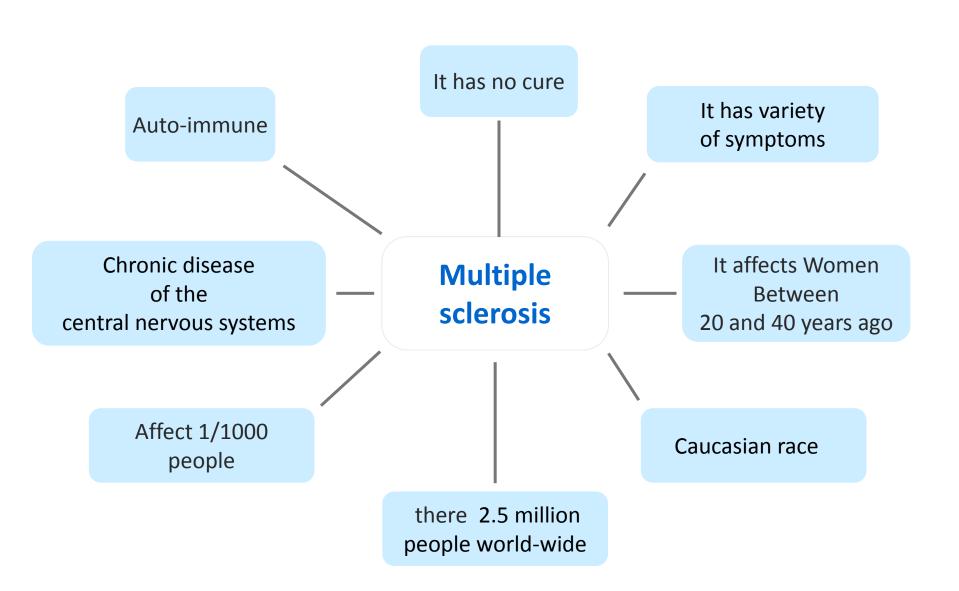
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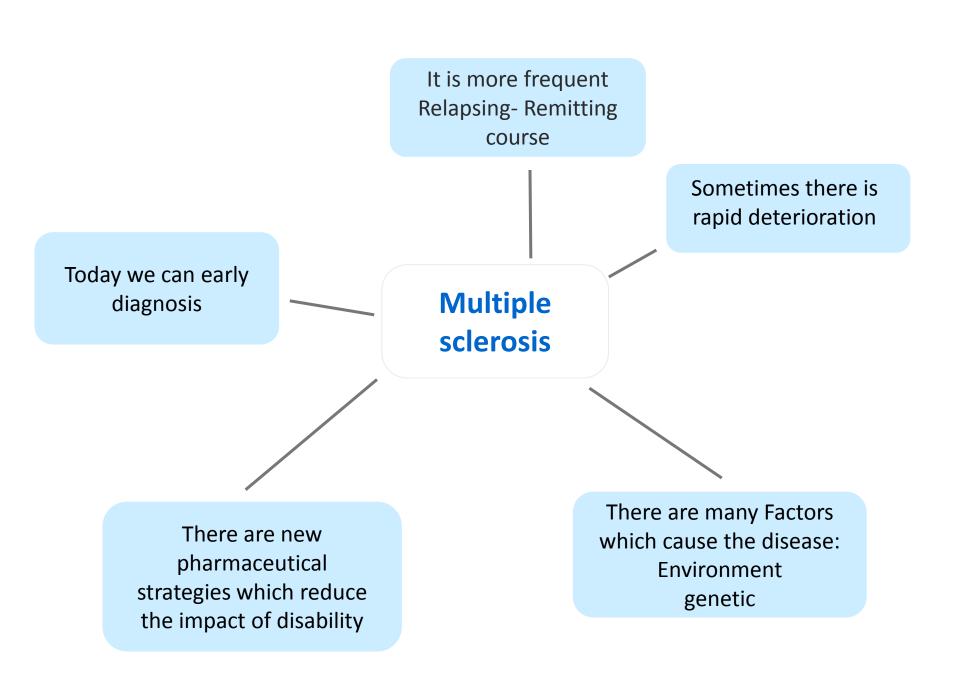


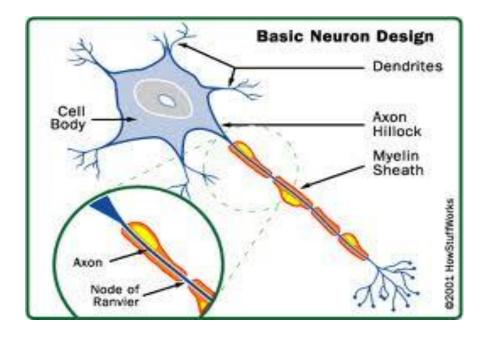


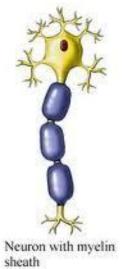






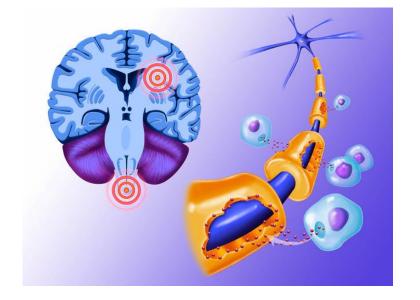




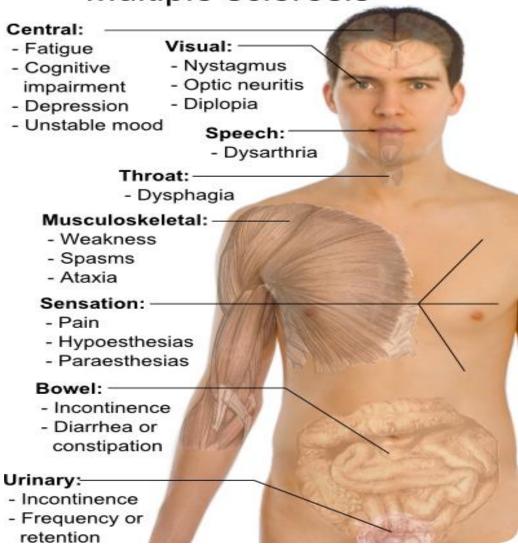


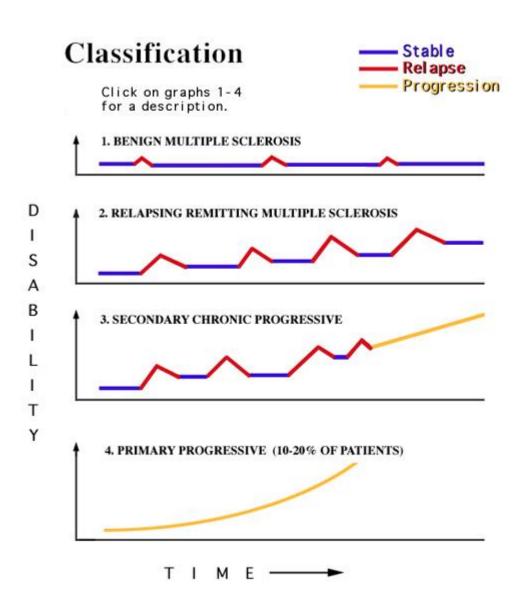


Neuron with damaged myelin sheath



# Main symptoms of Multiple sclerosis





#### Rehabilitation in multiple sclerosis

Rehabilitation is very important for in the results of treatment in individuals with multiple sclerosis.

Rehabilitation processes occur through gradual changes.

These changes integrate intrinsic and extrinsic mechanisms of the individual, promoting adaptations to the needs and activities of daily living according to individual goals



(Pelletier, Audoin, Reuter, Ranjeva, 2009; Khan, Pallant, 2007)

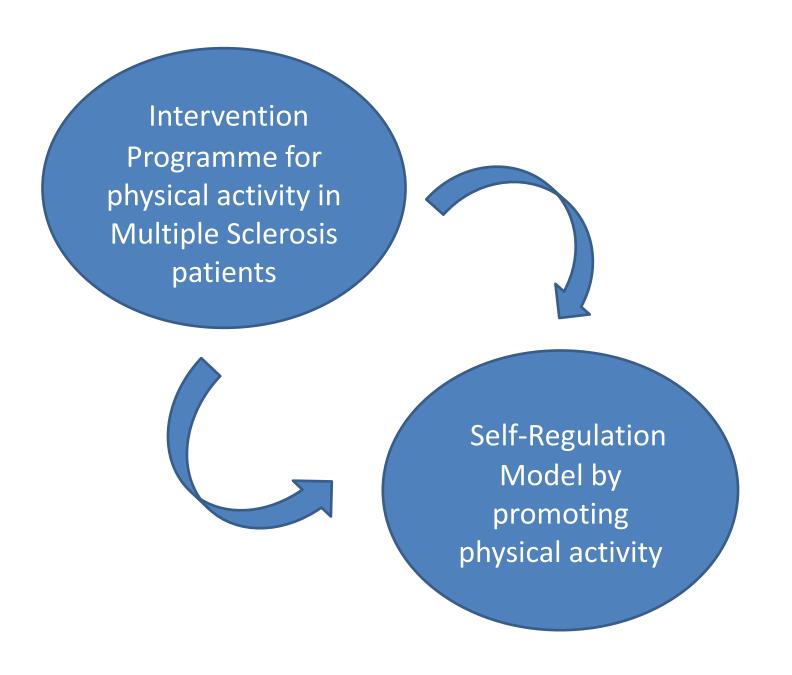
#### Recommendations for exercise in MS

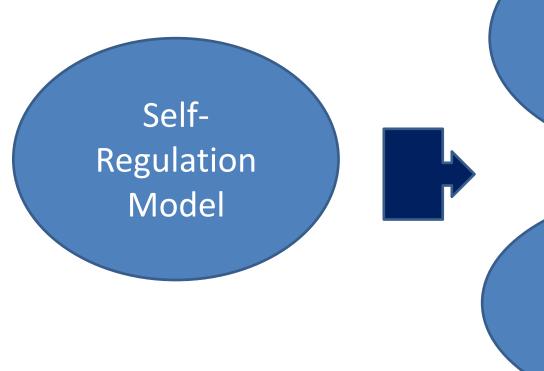
- These recommendations apply only to patients with EDSS less than 7
- Moderate intensity aerobic exercise for a total of 20 to 30 minutes, twice or three times for week.
- The resistance training with low or moderate intensity is well tolerated by patients with MS.
- Associated with these exercises were recommended flexibility exercises of moderate intensity, as well as strengthening exercises.

(Dalgas, Stenager, Ingermann- Hansen, 2008; Martin Ginis, Hicks, 2007; White, Dressendorfer, 2004)

# **Exercise Program**

- The exercise program should consist of 4-8 different types of exercises.
- -Should be implemented first to exercise the large muscles, and then exercises for small muscles.
- -Should be implemented with higher incidence in the strengthening of the lower limbs.
- -The exercises should start with 1-3 repetitions, gradually increasing to 3-4 repetitions.
- -The exercises should not increase body temperature





- -Definition of personal goals and behavioral
- Guideline for the realization of the goals

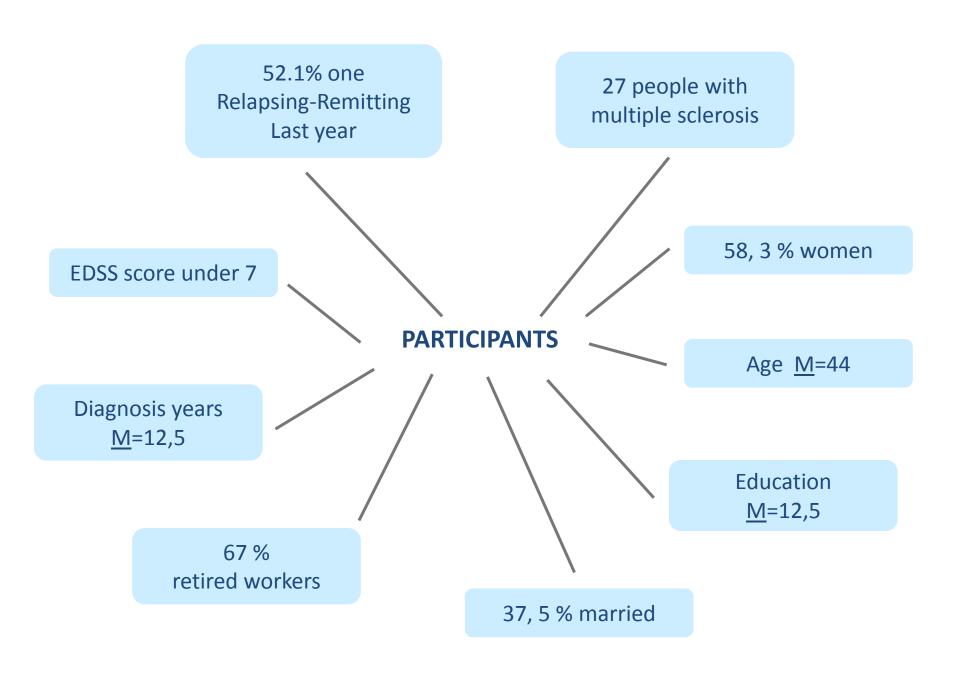
- -Implementation strategies
- -Efficiencies in results
- Feedback of results

## **Objective**

The aim of this study is to examine the implications of the program of self-regulation in the perception of illness and mental health (psychological well-being domain) in MS patients.

## **Methods**

This is a prospective, with consecutive patients (nonrandomized)



#### Instruments



- -The assessment of variables used one "Please classify your disease?" with an answer in numerical scale between "0" (Very bad) and "11" (very good).
- Mental Health Inventory (MHI-38) Domain of Psychological well-being

Promotion of Physical Activity

Auto-regulation Intervention Program

> Intervention Program IPPA

Group of eight to ten people

First 40m. - Group counseling Second 30m. – physical activity Last 20 m. home work to do during the week

One session for week with 90 minutes,
Seven weeks

### Results

Correlation severity of the disease perception and psychological well - being

First time intervention program
Time A
(<u>r</u>=0.26, p<0.05)

Last time intervention program
Time B
(<u>r</u>=0.37, p<0.01

### **Discussion**

- -The results suggest that the intervention program helps people with MS, to increase the perception of psychological well-being, identifying ways to overcome the limitations caused by the disease.
- -Through this model people can implement a more active life, through strategies defined for them.
- The IPPA can be helpful in dealing with everyday life , and feel better health perception.

### **Conclusion**

We conclude that the program of self-regulation for physical activity in patients with MS can improve the relationship between the perception of disease severity and psychological well-being.

# Thank you very much





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