Measuring quality of life in patients with relapsing-remitting MS (RRMS)

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Multiple sclerosis is an inflammatory, demyelinating, neurodegenerative disease of the central nervous system of unknown etiology.
In the early stages more than 80% of individuals affected by MS experience a relapsing-remitting disease characterized by relapses and remissions.

Patients

79 patients affected by relapsing–remitting multiple sclerosis according to the Mc Donald criteria (65.8% women, 34.2% men) (mean age 39.9) were enrolled in this study.
The patients had a disability corresponding to a mean score of 2.2 on EDSS. 59.5% had been treated with interferon immunomodulators, 40.5% had been treated with monoclonal antibodies. These patients attend the Multiple Sclerosis Centre on an ongoing basis.
Exclusion criteria were co-morbidity with other neurological or psychiatric diseases, history of alcohol and drug abuse. Each participant has given written informed consent.

Materials and Methods

Quality of life was assessed using the SF-36 questionnaire.
Clinical disease progression was assessed using the EDSS. The non-parametric Spearman correlation test was applied in order to assess the existence of a significant interdependence between EDSS and all variables related to individual profiles.
The Mann Whitney test was applied in order to compare male and female patients and, also, patients receiving first-line and second-line treatments. Statistical analyses were performed using SPSS 17.0 for Window package.
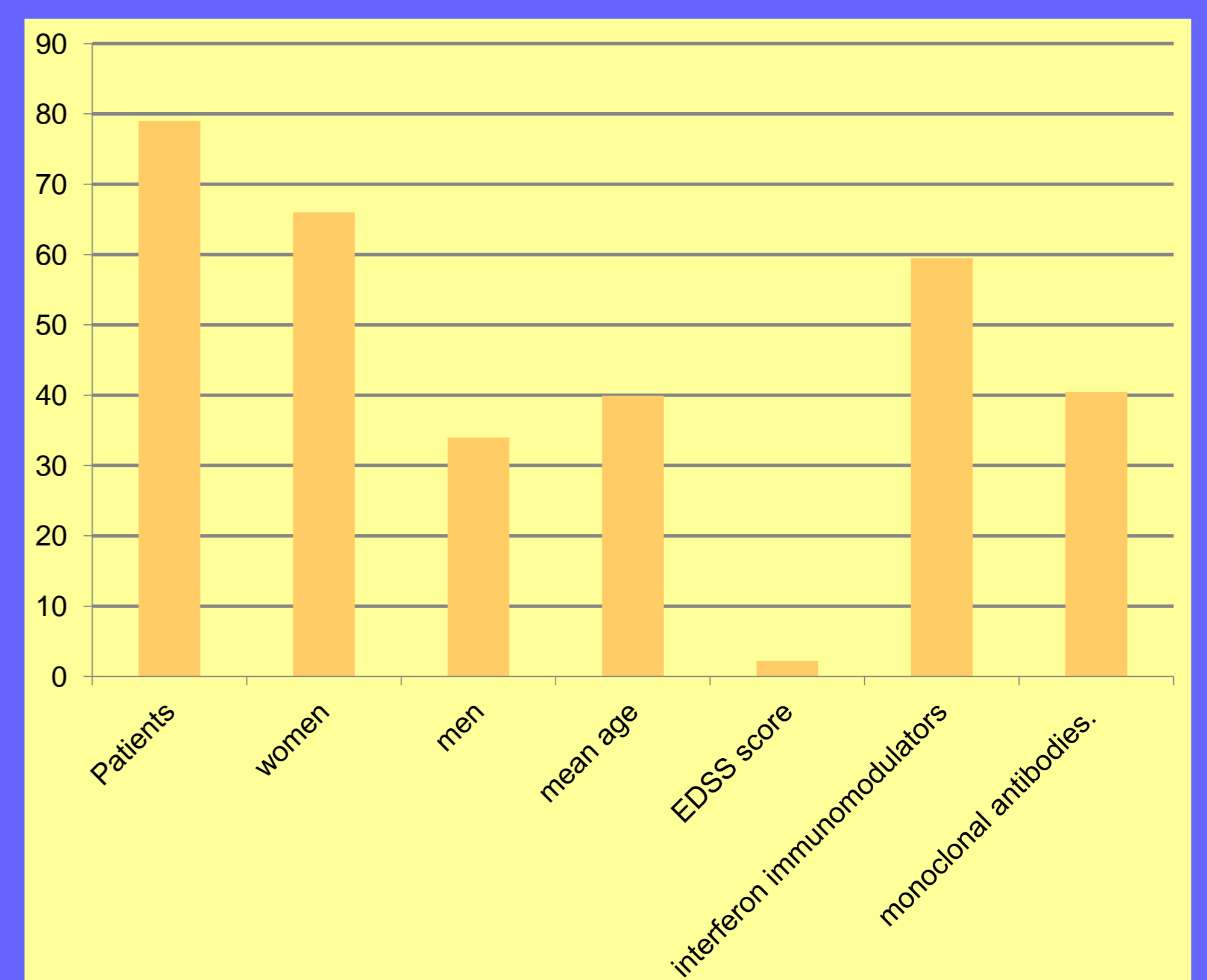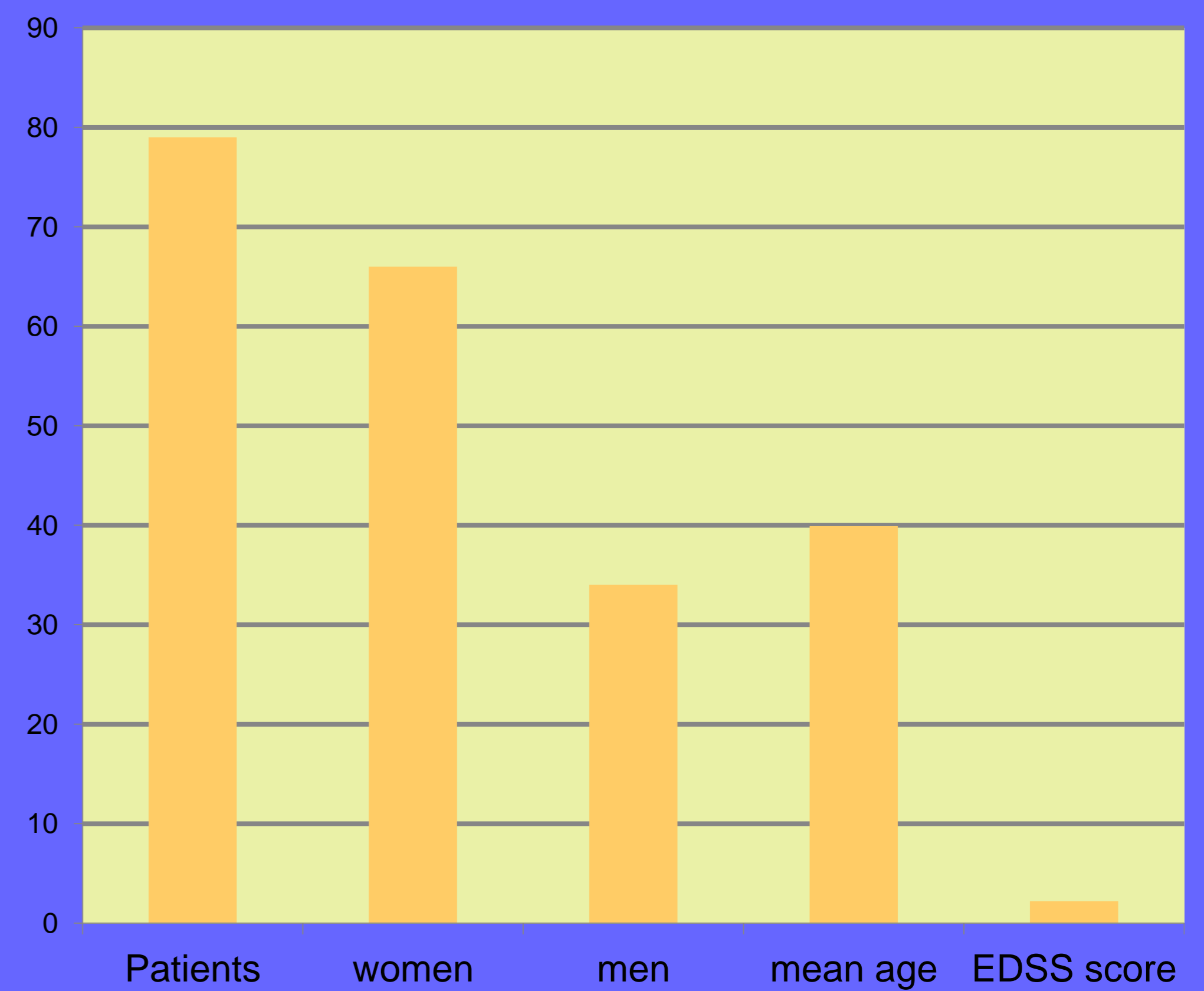
Results and comments

There is a significant positive correlation between years of disease and EDSS score (p=0.011). No significant statistical differences were identified between genders, referring to years of disease and EDSS score. Comparison between patients treated with interferon immunomodulators and patients treated with monoclonal antibodies shows there are no significant differences with regard to individual profiles, except for the role emotional parameter (p=0.032), which is significantly higher for patients in the group treated with interferon immunomodulator (mean 63.7 ± 42.7) compared to patients treated with monoclonal antibodies (mean 43.5 ± 40.9). Finally, the assessment of the correlation between EDSS score and all the variables considered referring to individual profiles shows a highly significant inverse correlation (p<0.001) with regard to variables such as role physical, bodily pain, general health, vitality and social functioning. Negative correlations were found with role emotional (p=0.002) and mental health (p=0.008). The correlation between EDSS score and standardized profile variables shows a significant negative correlation with RPI (p<0.001) and MHI (p=0.028).
The clinical interpretation of quality of life may provide clinicians with information regarding the general health status of their patients and a better therapy adherence.

References

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