The impact of fatigue and depression on quality of life in multiple sclerosis patients in a tertiary MS Center.

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Introduction:

Fatigue in multiple sclerosis patients is one of the most disabling and worst symptoms. Its prevalence is almost 80%. The impact of MS fatigue on a person's quality of life is, therefore, considerable. Depression increases the magnitude of fatigue and has a negative impact on patient's quality of life.

Aim:

The purpose of this study was to examine the impact of fatigue and depression on quality of life in multiple sclerosis patients in a tertiary MS Center.

Methods:

A retrospective analysis was performed using records of 78 Relapsing Remitting MS patients. The scales that were used to assess symptoms of fatigue and depression, were the modified Fatigue Impact Scale (mFIS) and Beck Depression Inventory (BDI). Values represent mean ± standard error of mean. A multiple Regression analysis by the use of a General Linear Model (univariate) was conducted with total EuroQoL score. Age, gender, and disease duration as well as mFIS and BDI scores were set as independent variables. In order to control for multicollinearity, a Pearson's Correlation analysis was conducted for mFIS and BDI scores and these items were not included simultaneously in the same model.

<u>Results</u>: 78 patients with RRMS (m=26, f=52) of mean age 40,67±1,4 were included. Mean disease duration was 10,44 ± 1,15 years. Mean scores for mFIS and BDI were 26,97 ± 2,19 and 3,73±0,48, respectively. Mean total EuroQoL score value was 69,74±2,17. For total EuroQoL score, Fatigue was a strong predictor (p<0.001). Similarly, when BDI was included in the model instead of fatigue it was shown to be a strong predictor for EQ total score (p<0.001). Overall a stong predictive value of the models was shown (p<0.001).

<u>Conclusions</u>: Our data show that fatigue and depression as estimated by mFIS and BDI scales are strong predictors of perceived quality of life in MS.