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Health related quality of life and disease modifying treatment continuation among multiple sclerosis patients – a multicentre cohort study

Background
Health related quality of life (HRQOL) is an important predictor of individuals’ management of multiple sclerosis (MS). The association between HRQOL and continued disease modifying treatment (DMT) in MS patients is unknown.

Objectives
To assess the overall HRQOL in a population based cohort of recently diagnosed MS-patients compared to the general Norwegian population, and to compare HRQOL to motivation to DMT in MS patients.

Methods
This multicenter retrospective survey study reports on HRQOL and DMT continuation among a cohort of all patients (n=518) diagnosed with relapsing remitting MS according to the McDonald criteria during 2000-2007 in four counties in Norway and part of Oslo. HRQOL was measured by the SF-36 version 2 Health Survey. Standardised scores were used to compare results to the general Norwegian population (n=8,827). The mean and standard deviation of the general population in SF-36 were 50 and 10 respectively. Regression analysis explored the association between SF-36 summary measures of Physical Health and Mental Health and MS-patients motivation (Visual Analogue Scale) to DMT.

Results
The DMT continuation rate was 42.5% (n=180), 12.5% (n=53) had ended treatment, 19.5% (n=83) switched treatment and 25.5% (n=108) were never treated. Patients had lower mean scores for all health dimensions of the SF-36 compared to the Norwegian general population. This difference was especially marked for social functioning (mean=31.1), mental health (mean=32.7), general health (mean=39.7) and vitality (mean=40.9). Among groups of adherence to DMT difference in SF-36 scores were found for physical functioning (p<0.001), role-physical (p=0.002), general health (p=0.022), vitality (p=0.05) and mental health (p=0.01). Patients never treated scored higher on physical summary scale (45.2, p=0.007) and lower on mental summary scale (36.1, p=0.01). Patients with high score on SF-36 physical health and low score on SF-36 mental health were less motivated to practice DMT.

Conclusions
MS patients, regardless of DMT, had lower HRQOL than the general population. Although never treated patients were found to have the best physical health, they had lower mental health. This emphasizes the need of increasing motivation to DMT also among patients with low mental health and otherwise high physical health and functioning. Behavioral aspects such as HRQOL should be given more attention when considering motivation to DMT in clinical practice.