OBJECTIVES: Multiple sclerosis (MS) is a chronic progressive neurologic disease and one of the most common causes of disability among young adults. Despite the clinical manifestations and symptoms of MS are diverse, disease severity is generally measured by ambulation based Expanded Disability Severity Scale (EDSS). While EDSS captures well the level of disability due to the involvement of lower limbs, MS patients may have more bladder, its ability to capture other aspects such as fatigue and mental function are poor. The aim of this study was to explore the relationship between two patient-based measures, a self-administered EDSS and Multiple Sclerosis Impact Scale (MSIS-29), a psychometrically validated instrument measuring the physical (20 items) and psychological (nine items) impact of MS.

METHODS: In total, 553 Finnish persons with MS (PwMS) drawn from the membership register of the national patient association completed a postal survey, including EDSS and MSIS-29. RESULTS: PwMS at every (0-8) impairment level of the EDSS scale were represented. The mean EDSS score was 4.0, indicating moderate disability. The physical impact of MS was strongly related to disease severity. In the most severe disease (EDSS 8-9), the psychological impact increased synchronously with the EDSS score in mild disease (EDSS 0-3) and peaked at EDSS 5, declining thereafter from EDSS 5 to 7. In most severe disability (EDSS 8-9) the psychological impact increased significantly compared to the mild disease.

RESULTS: The physical burden of MS increases steadily with self-assessed disease severity, whereas the psychological burden does not go hand in hand with the self-assessed severity of the disease.

PND76
CHALLENGES IN TRANSLATING THE MULTIPLE SCLEROSIS INTERNATIONAL QUALITY OF LIFE (MUSIQOL) QUESTIONNAIRE IN 57 LANGUAGES
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OBJECTIVES: The Multiple Sclerosis International Quality of Life (MusiQol) questionnaire is a self-administered, measure designed to evaluate the quality of life of patients with multiple sclerosis (MS). The MusiQol was co-developed in 14 countries. It is composed of 31 items describing nine dimensions (activity of daily living, psychological well-being, symptoms, relationships with friends, relationships with family, relationships with health care system, sentimental and sexual life, coping, and mood). The purpose of this study is to present the challenges faced during the translation of the MusiQol in 57 additional languages representing seven language families.

METHODS: In each country, the translation process (linguistic validation) was conducted by a linguistic expert, using either the standard forward-backward methodology or the adapted process, including cognitive interviews with six patients. The basis for discussion was the concept list developed in collaboration with the authors.

RESULTS: Semantic and cultural issues emerged during the process. The nature of the challenges differed with the contextual activities: e.g., integration, interruption, limitation... could not be literally translated in most of the countries. Patients had difficulties understanding the words “integration, interruption, limitation.” The periphery and examples suggested in the concept list had to be used in most cases. Examples of solutions will be provided. Second, activities (e.g., shopping, going out to a movie, Do-It-Yourself, gardening) described in the original had to be adapted to the religious and social context of the target countries. For instance, “doing housework” had to be rephrased “keeping the housework” in Saudi Arabia, since cinemas are forbidden for religious reasons. Other examples will be presented.

CONCLUSIONS: The initial simultaneous development of the MusiQol in 14 countries minimized the challenges faced during the translation in 57 additional languages. The collaboration with the developers and the patients’ interviews helped to solve the major issues.

PND77
REPLACING REMITTING MULTIPLE SCLEROSIS PATIENTS INITIATED ON ORAL DMF REPORT A better QUALITY OF LIFE COMPARED TO PATIENTS ON PLATFORM THERAPIES AS MEASURED BY EQ-SD
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OBJECTIVES: Multiple sclerosis (MS) is an unpredictable disease that can have physical, psychological, and social impacts, reducing health-related quality of life (HRQOL).

RESULTS: To compare the HRQoL in patients initiated on delayed-release dimethyl fumarate (PND77), or DMF, also known as gastro-resistant DMF) and prior approved interferon β-1a or glatiramer acetate (ABCRe) therapies.

METHODS: Data were identified from the Adelphi MS Disease Specific Programme, a cross-sectional study of MS patients in five European countries and the US. Relapsing Remitting MS (RRMS) patients were identified from the Platform cohort, utilizing a propensity score generated from age, gender, EDSS score at current treatment initiation, BMI, duration of current treatment, line of therapy, time since MS diagnosis, and number of comorbid conditions. RESULTS: A total of 252 (29 DMF, 223 ABCRe) patients completed the Adelphi HRQoL questionnaires. The overall HRQoL score was significantly lower in DMF patients compared to ABCRe patients (AT=0.45, p<0.001, vs. 1.95). Significant differences were observed in four of the five subscales, as follows: fatigue/thinking (ATE=0.47, p<0.001, vs. 1.90), lower limb mobility (ATE=0.43, p<0.009, vs. 1.84), social function (ATE=0.57, p<0.001, vs. 2.05), mood (ATE=0.50, p<0.001, vs. 1.93), and sexual function (ATE=0.45, p<0.001, vs. 2.0). The ATE for upper limb mobility score was not statistically significant (ATE=0.15, p>0.075, vs. 1.38).

CONCLUSIONS: RRMs patients on DMF had significantly better HRQoL as measured by the HAQUAMS, versus RRMs patients on ABCRe therapies.

PND79
A SYSTEMATIC REVIEW OF THE HUMANISTIC BURDEN OF DISEASE IN PATIENTS WITH FABRY DISEASE
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OBJECTIVES: Fabry disease is a rare, progressive, X-linked lysosomal storage disorder caused by deficiency of α-galactosidase A. Multiple major organs are affected, impacting on health-related quality of life (HRQoL). Systemic disease requires lifelong treatment with intravenous enzyme replacement therapy (ERT); two products available, which has been shown to improve long-term outcomes, delay organ damage and improve HRQoL. We present the results of a systematic review of the current evidence of Fabry disease therapy. We included systematic reviews and/or meta analysis in the MEDLINE, EMBASE and congress proceedings to identify studies reporting general HRQoL in patients with Fabry disease.

RESULTS: The search identified 30 relevant publications reporting data for ERT-treated and -untreated male and female adult and paediatric patients. The majority of studies assessed HRQoL using the 36-item Short-Form Health Survey (SF-36, n=18) and/or 5-dimension European Quality of Life instrument (EQ-5D, n=8). HRQoL was reduced compared to the general population (n=25, 0.001, p<0.001) and was worse than or similar to other chronic or progressive conditions (n=6). Furthermore, HRQoL deteriorated with age (n=2) and with progressive disease severity (n=1). Two clinical trials were identified (one placebo-controlled and one open label) that described improvements in HRQoL in ERT (Fabrazyme, Fabryase). There were five analyses of registry data for patients receiving ERT: four studies demonstrated sustained HRQoL improvements with up to 5 years of agalsidase alfa treatment, and one study reported improvements after 1 and 2 years of agalsidase alfa therapy in two small cohort of Fabry patients. The limited available data suggest that this improved while on ERT. Further studies are required to quantify treatment-associated HRQoL outcomes.

PND80
HEALTH-RELATED QUALITY OF LIFE IN DOUBLE-BLIND PHASE III STUDIES OF BRIVARACETAM AS ADJUNCTIVE THERAPY OF PARTIAL-ONSET SEIZURES
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OBJECTIVES: To assess the effect of brivaracetam (BRV), a new adjunctive therapy of partial-onset seizures (POS), on health-related quality of life (HRQoL).

METHODS: Data from three previously reported Phase III trials of BRV in adults with refractory POS (NCT00490035, NCT00464269, NCT01261325) were pooled. The POLE-31-P was collected at randomization and after the 12-week treatment period or early termination. The POLE-31-P is an epilepsy-specific instrument with seven subscales and a Total score ranging from 0 (worst) to 100 (best HRQoL). Mean change from baseline to last observation was compared between BRV and placebo using ANCOVA. Additional analyses were completed on the per protocol patient and ABCRe cohorts, utilizing a propensity score generated from age, gender, EDSS score at current treatment initiation, BMI, duration of current treatment, line of therapy, time since MS diagnosis, and number of comorbid conditions. RESULTS: There were five analyses of registry data for patients receiving ERT: four studies demonstrated sustained HRQoL improvements with up to 5 years of agalsidase alfa treatment, and one study reported improvements after 1 and 2 years of agalsidase alfa treatment. In two small cohorts of Fabry patients, overall HRQoL either improved in all SF-36 domains after 7 years of ERT (n=18) and/or 5-dimension Eur. CONCLUSIONS: RRMs patients on DMF had significantly better HRQoL as measured by the HAQUAMS, versus RRMs patients on ABCRe therapies.