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categorized into three groups: placebo, PR-fampridine responders (those with a mean improvement from baseline in the 12-item MS walking scale [MSWS-12] of \geq 8 points over 24 weeks), and PR-fampridine nonresponders (those with worsening, no change, or <8 points improvement in MSWS-12). Changes from baseline were calculated for the EQ-5D utility index and visual analogue scale (VAS) by visit and over the 24 weeks. Within-group and pairwise comparisons were assessed based on the least square (LS) means using analysis of covariance (ANCOVA) models adjusting for baseline EQ-5D scores. RESULTS: The placebo patients (n=64), responders (n=33), and nonresponders (n=35) were similar in baseline age, race, weight, and number of relapses in the past 1 and 2 years. The responders had higher mean baseline EQ-5D utility (0.56 vs. 0.51 and 0.52, respectively) and VAS (62.9 vs. 59.1 and 60.5, respectively) scores than the placebo patients and nonresponders. Over the 24 weeks, the EQ-5D utility score improved in the responders (mean change: 0.06, 95% CI: [0.01, 0.12]) but worsened in the placebo patients (mean change: -0.03,95% CI: [-0.07, 0.01]) and nonresponders (mean change: -0.07,95% CI: [-0.12, -0.02]). Similar trends were observed in the VAS scores although the differences within groups were generally not statistically sig $nificant. \ \textbf{CONCLUSIONS:} \ PR-fampridine \ 10 \ mg \ tablets \ demonstrated \ significantly$ greater improvement in QoL among responders, despite starting from higher baseline EQ-5D scores, than the placebo or nonresponder groups.

THE BURDEN OF PRIMARY GENERALIZED TONIC-CLONIC SEIZURES IN EUROPE AND THE UNITED STATES: AN ANALYSIS OF THE NATIONAL HEALTH AND WELLNESS SURVEY

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OBJECTIVES: Many prescription medications are available to treat Primary Generalized Tonic-Clonic (PGTC) seizures. The objective is to understand the impact of PGTC on health outcomes. METHODS: Data from the 2011-2013 U.S. and 2010 & 2013 5E.U. National Health and Wellness Survey (NHWS) were analyzed. The NHWS is self-administered, internet-based survey of a nationwide sample of adults (18+ years) stratified to represent the demographic composition of each country. Patients self-reported a diagnosis of epilepsy with PGTC and were grouped as ≥ 1 seizure per week, 1-3 seizures per month, 1-4 seizures per year, <1 seizure per year (reference). Patients provided information on health status (mental (MCS), physical component summary (PCS), and SF-6D (health utility) from the SF-36v2), resource utilization in the past six months and productivity loss (Work Productivity and Activity Impairment Questionnaire). Costs were estimated from the literature. Regression analyses were conducted controlling for covariates (e. g., age, gender, marital status, comorbidities, years diagnosed with epilepsy). **RESULTS:** There were 782 patients in the U.S. and 418 in the 5EU. In both geographies the proportion of employed respondents decreased as frequency of seizures increased. Over 75% of patients in both geographies were taking a prescription medication for epilepsy. After adjustments, patients reporting <1 seizure per year had greater PCS, health utilities, lower activity impairment, fewer emergency room visits and lower total direct costs compared to the other three seizure groups (p<0.05 both geographies). Among employed patients, patients reporting <1 seizure per year had the lowest overall work impairment (p<0.05 both geographies). For all employable patients (18-60 years) indirect costs were highest for the \geq 1 seizure per week group (p<0.05 both geographies). **CONCLUSIONS:** Results suggest a significantly higher economic and humanistic burden in patients with more frequent seizures. PGTC patients are very much in need of newer treatment options.

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FACTORS ASSOCIATED WITH CAREGIVER'S BURDEN IN RELAPSING-REMITTING MULTIPLE SCLEROSIS AND SATISFACTION WITH CURRENT THERAPIES. MS-FEELING STUDY

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OBJECTIVES: To describe the characteristics and burden of caregivers and patients affected by relapsing-remitting multiple sclerosis (RRMS), and to describe their satisfaction with treatment. METHODS: Multicenter, observational, cross-sectional study in RRMS patients \geq 18 years (y), treated for \geq 1y. Burden was assessed with the Zarit Burden Interview. Other measures were: Center for Epidemiologic Studies Depression Scale, short form (CESD-7); and treatment satisfaction of caregivers (adhoc questionnaire) and patients (Treatment Satisfaction Questionnaire for Medication (TSQM)). RESULTS: We included 180 patients (mean (SD) age 41 (11) y, 66% female) and caregivers (47 (12) y, 56% female, 67% economically active). Most caregivers were relatives (59% partner; 25% parent; 9% brother or sister) and lived with the patient (86%); 37% helped with the medication. Median (Q1, Q3) time since diagnosis was 7 (4,10) y and between diagnosis and first treatment, 0.3 (0.2, 1.3) y. Most patients received monotherapy with interferon beta (51%), glatiramer acetate (20%), natalizumab (14%) normalization of the state of Factors associated with burden were: EDSS (mean (SD) in caregivers with burden vs without burden, respectively: 4.0 (2.1) vs 2.6 (1.9), p<0.0005), years of caregiving (mean: 4.0 (4.5) vs 2.7 (4.5) y, p=0.005), daily hours dedicated to patient (10.8 (12.1) vs 5.8 (4.6) hours, p=0.038), and >1 drug (39% of burden when patients take $\!\ge\!2$ drugs vs 16% with monotherapy, p=0.004). Other caregiver's characteristics (age, gender, professional activity, relationship with patient or cohabitation) were not significantly associated. 28.2% of caregivers had depression (CESD-7≥15). Both patients (90% satisfied or very satisfied according to the TSQM) and caregivers (mean of 7.6 (2.3) on a scale from 0-10 [maximum satisfaction]) were quite satisfied with treatment. CONCLUSIONS: In the RRMS population with moderate disability, around 2 in 10 caregivers have some degree of burden, and 1 in 4 suffer depression. The burden increases proportionately with disease severity and number of medications administered. Overall, patients and caregivers are satisfied with treatment.

IMPACT OF CAREGIVING FOR PATIENTS WITH ALZHEIMER'S DISEASE AND DEMENTIA ON PSYCHIATRIC AND CLINICAL COMORBIDITIES IN BRAZIL

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OBJECTIVES: Patients with dementia due to Alzheimer's disease (AD) are often cared for by family members who experience physical, psychological, social, and financial burdens associated with provision of care. This study quantifies the impact of caregiving in Brazil and helps identify characteristics associated with caregiving. METHODS: Data were analyzed from the 2012 National Health and Wellness Survey (NHWS) in Brazil (n = 12,000), an Internet-based survey of adults (aged 18+), using stratified random sampling (by sex and age) to ensure demographic representation of the Brazil adult population. Caregivers were compared with non-caregivers on select comorbidities considered potential outcomes of caregiving, plus sociodemographic characteristics, health characteristics and behaviors, and Charlson comorbidity index (CCI) scores. Binary logistic regression models assessed comorbidities associated with caregiving, adjusting for potential confounds (CCI, age, gender, education, income, $\frac{1}{2}$) and $\frac{1}{2}$). insurance, and marital status). **RESULTS:** Among 10,853 respondents (caregivers [n=209]; non-caregivers [n=10,644]), caregivers were on average 42.1 years old, and 53% were female, 52% married/living with a partner, 87% insured, and 42% living with 1+ children in the household. Caregivers vs. non-caregivers were more frequently obese, smokers, insured, employed, and with college education or above, and they had higher CCI scores and higher income, all p < .05. Adjusting for covariates, caregiving was associated with significantly increased risk of depressive symptoms (odds ratio [OR] = 2.008), major depressive disorder (OR=1.483), anxiety (OR=1.714), insomnia (OR=1.644), hypertension (OR=1.584), pain (OR=1.704), and diabetes (OR=2.103), all p<.015. CONCLUSIONS: This is the first study on caregivers for persons with dementia in Brazil using a large dataset (NHWS). Being a caregiver (compared with noncaregiver) is a predictor of overall psychiatric and clinical disorders in this sample. The online survey format provides certain sampling advantages but may under-represent caregivers without access/comfort with online technology. Direct treatment and policies to help caregivers are needed in Brazil.

THE VALUE OF DIAGNOSTIC TESTS FOR ALZHEIMER'S DISEASE: DISCRETE-CHOICE EXPERIMENT AND CONTINGENT-VALUATION

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¹University of Applied Sciences Neubrandenburg, Neubrandenburg, Germany, ²Triangle Health Preference Research, Chapel Hill,, NC, USA, ³RTI Health Solutions, Research Triangle Park, NC, USA, 4 Eli Lilly and Company, Bad Homburg, Germany **OBJECTIVES:** Despite the existence of standardized medical criteria, clinical diagno-

sis of Alzheimer's disease remains difficult. Lack of diagnostic certainty or possible distress related to positive results could limit application of new testing technologies. Independent of the therapeutic value of prevention or cure, however, diagnostic information could have value in informing contingency planning or have intrinsic value: the value of "just knowing". This paper aims to quantify respondents' preferences for obtaining AD diagnostic tests and to estimate the perceived value of AD test information. **METHODS:** Discrete-choice experiment (DCE) and contingent-valuation (CV) questions were administered to N=1301 respondents aged 60 years or older in Germany and the United Kingdom. 12 pairs of virtual AD diagnostic tests were presented (defined by test type, test precision defined by false-positive or falsenegative test results, and test cost) and a no-test alternative. DCE questions were based on a predetermined experimental design. A double-bounded, dichotomouschoice CV question was used to further elicit willingness to take an AD test and pay for it. Choice data of respondents interested in taking a test were analyzed using random-parameters logit. A probit model characterized respondents who were not willing to take a test. **RESULTS:** Most respondents in both countries had a positive value for AD diagnostic test information. Most respondents who indicated an interest in testing in Germany (N=631) and the UK (N=670) preferred brain imaging without radioactive marker, followed by brain imaging with radioactive marker and then spinal tap. Diagnostic tests with better precision were preferred. German respondents had relatively greater heterogeneous preferences and lower moneyequivalent values for test features compared to UK respondents. CONCLUSIONS: Respondents preferred less invasive diagnostic procedures and tests with higher accuracy. Diagnostic test accuracy was more important than test type. Respondents expressed a willingness to pay up to €700 to receive a less invasive test with the highest accuracy.

THE HUMANISTIC AND ECONOMIC BURDEN OF PARTIAL ONSET SEIZURES IN THE EUROPE FIVE AND BRAZIL USING A PATIENT SURVEY

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'Kantar Health, Princeton, NJ, USA, ²Eisai Inc., Woodcliff Lake, NJ, USA **OBJECTIVES:** The aim of this study was to understand the current impact of partial onset seizures (POS) on health outcomes and costs. METHODS: Patients were identified from the 2010 & 2013 5EU and 2011-2012 Brazil National Health and Wellness Survey, a nationally represented, internet-based survey of adults (18+ years). Patients self-reported a diagnosis of epilepsy with POS and were categorized into \geq 1 seizure per week, 1-3 seizures per month, 1-4 seizures per year, <1 seizure per year (reference). Patients completed the SF-36v2 (mental (MCS), physical component summary (PCS)), SF-6D (health utility), Work Productivity and Activity Impairment Questionnaire and reported on resource utilization in the past six months. Costs were estimated from the literature. Generalized linear regression analyses were conducted controlling for covariates (e.g., age, gender, marital status, comorbidities, years diagnosed with epilepsy). RESULTS: There were 175 patients in the 5EU and 32 in Brazil, 11.1% reported ≥1 seizures/week, 7.7% reported 1-3 seizures/month, $26.1\%\ 1\text{--}4\ seizures/year, and }55.1\%\ <1seizures/year.\ MCS,\ PCS,\ utilities,\ productivity$