Severity of pain (BPI-item-3) was statistically associated with total annual health costs; €1255 (932), €1473 (1198) and €1950 (1391) for mild, moderate and severe pain respectively, $p = 0.017$. Walking (FIQ1g) and work/domestic (BPI5d) interference were positive predictors for per patient annual drug costs, while pain problems and 12-month health state change (EQ-5D items 4 and 6) were negative predictors ($R2 = 0.283$, $p < 0.001$). **CONCLUSION:** In the primary care setting, annual per patient total direct health cost of Fibromyalgia showed weak but statistically significant association with patient disease interference and severity of pain. Less drug costs could be associated with poorer outcomes in term of health state change and level of pain.

OBESITY—Clinical Outcomes Studies

POB1

IMPACT OF OBESITY UPON COSTS AND ANTIPSYCHOTIC DRUG USE IN THE ADULT POPULATION SEEN IN SPANISH PRIMARY CARE CENTERS

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OBJECTIVES: To describe the association between obesity and costs and use of antipsychotic drugs (APDs) in patients seen by seven Spanish primary care teams (PCTs), under usual medical practice. **METHODS:** A retrospective, multicenter study was made with patients receiving APD treatment during year 2005. Obesity was considered according to W.H.O. as a body mass index (BMI) > 30 kg/m^2. Main measurements included APD consumption, sociodemographics, comorbidity/episodes, Charlson index (severity), and costs (semi-fixed and variable, visits, diagnostic/therapeutic procedures, referrals and drugs). Descriptive statistics, logistic regression model and analysis of covariance (ANCOVA) with Bonferroni correction were applied. **RESULTS:** A total of 42,437 patients (age: 50.9 ± 17.8 years, women: 59.9%) were included in the analysis. Obesity was present in 27.3% [CI: 26.9–27.7%]), with a 1.3% receiving APDs (typical: 48.8%, atypical: 51.2%; p = NS). Patients with obesity showed higher annual average of episodes (7.0 ± 4.0 vs. 5.5 ± 3.6), visits (12.1 ± 9.8 vs. 9.1 ± 8.5) and severity (0.5 ± 0.7 vs. 0.3 ± 0.6), $p < 0.001$. In the logistic regression analysis, obesity was related to APD use (OR = 1.5; CI: 1.3–1.8), hypertension (OR = 2.4; CI: 2.2 2.5), diabetes (OR = 1.4; CI: 1.3–1.5) and dyslipidemia (OR = 1.3; CI: 1.2–1.4), $p < 0.001$ in all cases. After adjusting, BMI was slightly higher in subjects on APD; 27.8 kg/m^2 vs. 27.4 kg/m^2, $p = 0.002$. Mean crude and adjusted (age, gender and comorbidities) annual costs were significantly higher in obese patients than in non obese; €980.89 ± 1,467.49 vs. €637.64 ± 1,244.49, $p < 0.001$, and €810.88 vs. €693.79, $p < 0.001$ respectively. All components of per patient per year costs were higher in the group of obese patients, $p < 0.0001$. **CONCLUSION:** Obesity was associated with the use of APDs and the presence of hypertension, diabetes and dyslipidemia. No differences were found between using typical or atypical APDs. Obese patients presented more comorbidity, use of health resources and associated costs.

POB2

REDUCING GLOBAL CARDIOMETABOLIC RISK IN OVERWEIGHT OR OBESE INDIVIDUALS WITH DYSLIPIDEMIA: PROJECTED BENEFITS OF RIMONABANT IN A REAL WORLD POPULATION

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OBJECTIVES: Clinical trials have demonstrated that rimonabant leads to significant improvements in cardiometabolic risk factors, including weight, waist circumference, lipids, and fasting glucose. This study translates these benefits into expected outcomes when rimonabant is administered to adults with dyslipidemia and a BMI>27 kg/m^2 in addition to diet and exercise. **METHODS:** A discrete event simulation was developed to project outcomes in individuals at increased cardiometabolic risk. Data from the Health Survey of England are used to create simulated adults free of cardiovascular disease (CVD) and diabetes but who are overweight or obese and have either elevated triglycerides or low HDL. Equations derived from the RIO trials are used to calculate changes in individual cardiometabolic risk factors as a function of time, treatment and baseline risk factors. Treatments considered are diet and exercise alone or with the addition of rimonabant 20mg. The simulation determines when individuals develop CVD, diabetes, or microvascular disease (MVD) using published equations from Framingham, UKPDS and the San Antonio Heart Study. **RESULTS:** After one year, simulated patients on rimonabant lose an average of 4.4 kg compared to only 0.4 kg with diet and exercise alone. On average HDL levels increase by 0.07 mmol/L more with rimonabant; triglyceride levels fall by 0.27 mmol/L more. Over their lifetimes, 1000 rimonabant users experience 9 fewer CVD events, live 66 years longer, and avoid 334 years with diabetes. MVD events fall by 30. Extending treatment to 10 years results in 11% fewer CVD events and life expectancy gains of 234 years compared to one year of treatment. **CONCLUSION:** These results suggest that in overweight or obese patients with dyslipidemia, cardiometabolic risk factor improvements associated with rimonabant, which extend beyond those expected with diet and exercise alone, could translate to concrete health gains by preventing or delaying diabetes, MVD and acute CVD.

OBESITY—Methods and Concepts

POB3

A PROBABILISTIC BAYESIAN MARKOV MODEL IN WINBUGS FOR THE ECONOMIC EVALUATION OF THE TREATMENT WITH ORLISTAT OF ITALIAN OBESE PATIENTS

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OBJECTIVES: The WinBUGS software is a powerful tool to analyze data in the framework of the bayesian theory and has recently been shown useful in developing complex probabilistic Markov models. Despite some clear advantages, this technique has not been fully exploited in health economic evaluations. We developed a cost-utility and budget impact analysis of the use of orlistat in Italian obese patients through this innovative modelling approach. **METHODS:** A probabilistic Markov model has been developed to simulate outcomes of the obese Italian population after four years of orlistat treatment plus six years of follow-up. The efficacy of the treatment derives from the XENDOS study. The model integrates a Framingham Heart Study-based algorithm to estimate cardiovascular risk. The