effects of osteoporosis patients treated with oral bisphosphonate in Tianjin, China

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1Tianjin University, Tianjin, China, 2Tianjin Medical Insurance Research Association, Tianjin, China, 3Institute of Urban Employee Basic Medical Insurance database (2008–2010) with 30% random sample of enrollees. The index date was the first pharmacy claim date of oral bisphosphonate in 2009. Patients of RA were identified by the RA prescription. Patients with osteoporosis were identified by diagnosis of osteoporosis and oral bisphosphonate (alendronate and etidronate) was claimed accordingly. All-cause cost, osteoporosis-related cost, drug cost, and related health care utilization were estimated at 2009 dollars. Logistic regression analysis was applied to identify factors associated with expenditures. RESULTS: Of 853 patients identified, 64.6% were women. The mean age was 64.6 (±10.4) years. Of $1012.7 (±2586.2) all-cause inpatient cost per person per year, drug cost accounted for 37.9%. Of $1026.5 (±1108.8) all-cause outpatient cost per person per year, drug cost accounted for 19.1%, inpatient cost accounted for 61.1%, osteoporosis-related cost accounted for 37.9%. Of $1026.5 (±1108.8) all-cause outpatient cost per person per year, drug cost accounted for 62.4%. Of $1026.5 (±1108.8) all-cause outpatient cost per person per year, drug cost accounted for 39.6%, osteoporosis-related cost accounted for 61.5%. An average of 7.0 (±3.7) outpatient visits and 0.4 (±0.8) hospitalization admissions were found. Regression results demonstrated that patients with diabetes mellitus and nephropathy had higher all-cause costs for female patients and patients with pre-fracture had higher osteoporosis-related cost. CONCLUSIONS: The economic burden of osteoporosis is high for osteoporosis patients and is expected to increase considering the increment of life expectancy and the increasing number of elderly population. Governmental poli-
sis and policy guidance should be given to the impact of osteoporosis prevention and treatment in elderly population.

PMS32

THE COST OF OSTEOPOROTIC FRACTURES IN THE ROMANIAN POSTMENOPAUSAL WOMEN POPULATION

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OBJECTIVES: Little data are available regarding the economic burden of osteoporosis on the Romanian (public payer) health care system. This retrospective chart review estimates the direct costs of osteoporotic fractures in postmenopausal Romanian women. METHODS: Women aged >65 years diagnosed with osteoporosis, who sustained an osteoporotic hip, wrist or vertebral fracture between December 1, 2007 and December 31, 2008, were included in the study. Eligible patients in the study enrollment were patients to a sample of Romanian general and specialist hospitals were eligible: patients with multiple fractures or fractures resulting from co-morbidities were excluded. The duration of post-fracture follow-up was one year. The cost perspective included the costs covered by the Romanian national health insurance system and the patients’ budgets. Health care utilization was recorded from hospital and primary care resources, and then multiplied with national tariffs to obtain total costs. Bootstrap resampling was conducted to generate bias corrected and accelerated confidence intervals. RESULTS: Five general hospitals and two specialist hospitals in three Romanian cities participated. A total of 140 patients were included: 60 (42.9%) with fracture of the hip, 68 (48.6%) with vertebral and 12 (8.6%) with wrist osteoporotic fractures. The mean [95% CI] total cost of osteoporotic fracture management was $1,155 [1,044—1,304] per patient. Medications [mean [95% CI], $544 [447—624] and hospital care ($447 [393—512]) were the most cost drivers, accounting for 57.3% and 24.3% of the average total cost respectively. Hip fractures were more costly than vertebral and wrist fractures [mean [95% CI], $1,384 [1,186—1,643], $991 [852—1,172], and $1,394 [1,165—1,717], respectively. CONCLUSIONS: This study is a first attempt to report the economic burden of postmenopausal osteoporotic fractures patients in the Romanian health care system. The results suggest that osteoporotic fractures pose a significant burden on both drug and hospital budgets. Effective treatment strategy to avoid such fractures may reduce this burden.

PMS33

MEDICAL COSTS OF PATIENTS WITH RHEUMATOID ARTHRITIS AND ASSOCIATED COMORBIDITIES IN TURKEY

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OBJECTIVES: To identify factors associated with the cost of RA care and calculated risk adjusted costs associated with RA care in Turkey. The retrospective chart review of RA treatment and disease activity was also examined. METHODS: This cross-sectional study was performed in 10 tertiary rheumatology centers. Eligible patients were those of age diagnosed with RA between 1996 and 2007. A total of 3,338 patients were studied. Patients’ visual analog scale (VAS), patient’s global disease activity (GDA) and routine assessment of patient index data 3 (RAPID-3) scores were on average 44.15, 5.19 and 5.10 respectively. Most patients were prescribed immunosuppres-
sing medications and glucocorticoids (87% and 61.2%, respectively). After adjusting all variables, total annual medical cost was $2,671. The most significant portion of all expenditures was due to pharmaceutical costs $1,987, while outpatient costs were $303, inpatient costs were $360 and co-payments were $71. 14% of patients experienced work loss due to RA. On average, annual costs due to workload loss were $480. 5.4% of patients also had other RA-related consultations, which were not cov-
ered by insurance, bringing the average annual burden to $1,600 for these patients. 15 patients sustained an osteoporotic hip or wrist fracture and were treated in their condition such as the need for a new car, apartment or special equipment, spending an additional $1,640 in 1 year. 13.7% of patients required caregivers. The average annual out-of-pocket pa-
amount paid to caregivers was $1624. CONCLUSIONS: The annual medical cost of RA in Turkey, although significantly lower compared to European estimates, causes considerable economic burden. Drug costs constitute the major part of annual cost for RA followed by indirect costs.

PMS34

PATIENTS AS A SOURCE FOR COST OF RHEUMATOID ARTHRITIS STUDY

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OBJECTIVES: To perform the cost of rheumatoid arthritis analysis based on inquiry study with patients. METHODS: It is a micro costing study which was conducted between August and December 2012. The information was gathered with the support of the Association of patients with rheumatoid arthritis. The questionnaire was made available in the patients’ workspace and in front the physicians’ offices. Clarification in case of missing data was made by phone. The questions aimed to gather basic information about the characteristics of the patients, their phar-
maceutical therapy, frequency of medical visits, hospitalizations, and their health status self-evaluation. The direct health costs were calculated based on patients’ answers and insurance fund tariff. RESULTS: A total of 119 patients participated in the study, and nineteen were excluded due to insufficient information. Twenty-two patients were male and 78 were female aged 54-78 years on average. Almost half of the patients (42 patients) were employed. Thirty-four of patients had duration of the RA less than 5 years, 19 had duration between 5-7 years, another 14 patients had duration of between 7-10 years and 33 patients had duration more than 10 years. The total cost for the treatment of the patients for one month was $82 523 BGN (per person, per month on average 825 BGN). To one quarter of the patients a biological treatment was prescribed with a total cost of 74 026 BGN per year. Ninety-two of the patients answered that they are strictly taking their medicines.

Our study shows that most of the patients doesn’t knows what medicines they are taking or even doesn’t knows their dosing regime. CONCLUSIONS: The per-
centage of the patients that are not following the doctor’s prescription is very high and their reliability as a source of cost studies is not sufficient that impose the need of patient education.

PMS35

WORK PRODUCTIVITY LOSS DUE TO RHEUMATOID ARTHRITIS IN POLAND

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OBJECTIVES: To measure productivity loss of RA patients in Poland compared to results of selected studies. METHODS: In this study consecutive patients in