

data to calculate direct, indirect and intangible costs in patients receiving ART. **METHODS:** Multicenter prospective observational study in eight German specialized centres for infectious diseases: four private practices/outpatient centres and four hospitals offering inpatient- and outpatient facilities. CORSAR started recruitment during 2009 and ends in July 2012, when the last patient reaches week 96. After signing informed consent, patients were included and stratified by treatment line. Treatment history and concomitant therapy were taken from the patients' records. Direct costs for hospitalization, outpatient care, other medical care and treatment as well as out of pocket payments and quality of life data were calculated from the data collected by quarterly questionnaires. **RESULTS:** A total of 1154 patients with a mean age 47.5y receiving ART were included. Time since HIV-diagnosis was 10.6 years, 10.2% had viral load >50 cp/ml; 10.6% female; employment ratio 60.8%. Direct costs of treatment were mainly driven by antiretroviral drugs, accounting for 83.3%. Due to use of less complex ART-regimens and more frequent use of NNRTI-based ART in earlier treatment lines total costs were highest in advanced treatment-lines (>3rd) with 26,243 €/year compared to 22,718 €/year for initial therapy. The labour market participation rate also decreases with advancement in treatment lines (65% in first treatment line vs. 46% in >3rd treatment lines). Indirect cost due to productivity losses account for 7% of total costs. **CONCLUSIONS:** Total costs were higher in later lines of therapy due to more complex, less NNRTI-based regimens. In comparison to earlier studies the impact of Non-ART-costs decreased. Expenses to be borne by the patient increased but are still less than 1%, indicating an increasing financial burden of people living with HIV by their disease within the German health system.

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DEVELOPMENT OF TREATMENT COSTS OF PATIENTS UNDERGOING REMISSION INDUCTION CHEMOTHERAPY: A HISTORICAL COMPARISON BEFORE AND AFTER INTRODUCTION OF POSACONAZOLE PROPHYLAXIS

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OBJECTIVES: Prior trials have demonstrated efficacy and effectiveness of posaconazole in the prophylaxis of invasive fungal diseases (IFDs) in high-risk patients. Controversy exists about the cost effectiveness of posaconazole prophylaxis in neutropenic patients with a high risk of IFDs. We performed an analysis comparing the direct costs of posaconazole prophylaxis against topical polyene (thrush) prophylaxis in patients with acute myelogenous leukemia (AML) and myelodysplastic syndrome (MDS). **METHODS:** Data of AML/MDS patients receiving remission-induction chemotherapy were analysed to compare hospital costs of patients before (2003-05) and after (2006-08) introduction of posaconazole prophylaxis. All cases were part of an earlier analysis demonstrating effectiveness of posaconazole over topical prophylaxis. Duration on general ward, intensive care unit, mechanical ventilation, diagnostic procedures and all anti-infective drugs were included into the cost analysis. **RESULTS:** Patient groups were well matched according to age, gender, underlying disease, and duration of neutropenia. The average costs per patient in the posaconazole group (n=76) and the topical polyene group (n=81) were 21,040 € (95% CI: 18,204-23,876 €) and 23,169 € (95% CI: 19,402-26,937 €) per patient, respectively. Antifungal treatment costs were nominally higher in the posaconazole group (4,580 € [95% CI: 3,678-5,482 €] vs. 4,019 € [95% CI: 2,825-5,214 €]). Costs for antibacterials (1,316 € [95% CI: 1,039-1,593 €] vs. 1,533 € [95% CI: 1,238-1,827 €]) were numerically decreased in the posaconazole group. Average duration of ICU stays were 1.79 (95% CI: 0.68-2.90) days per patient compared to 3.83 (95% CI: 1.53-6.13) days per patient. Costs for diagnostic procedures were 611 € (95% CI: 478-744 €) and 653 € (95% CI: 552-754 €) per patient, respectively. **CONCLUSIONS:** In our hospital, there was a trend towards cost-saving by posaconazole prophylaxis in patients receiving remission-induction chemotherapy. These cost savings were primarily caused by a shorter overall length of stay and the less frequent ICU treatment of patients receiving posaconazole.

PIN35

COST OF ANTIMICROBIAL PRESCRIBING USING A LARGE PHARMACY DATABASE IN SOUTH AFRICA

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OBJECTIVES: To provide a general overview of antimicrobial prescribing cost in a South African primary care patient population whose prescriptions were dispensed by community pharmacies. **METHODS:** A retrospective, cross-sectional pharmacoepidemiological study was conducted on prescription data of a national community pharmacy group in South Africa for 2010. All records for antimicrobials were analysed. The MIMS classification system was used. **RESULTS:** A total of 660 500 patients received 1 576 593 antimicrobial products during 2010 (average of 2.39 products per year) at a total cost of R191 875 007. The average age of patients was 34.23 years. Most patients were females (58.32%), and they were prescribed 60.12% of antimicrobial products. The average cost per antimicrobial product was R121.70 (SD=R158.21). Antiviral agents were the most expensive (R195.67), followed by aminoglycosides (R188.42). The least expensive products were chloramphenicols (R17.25) and sulphonamides and combinations (R22.68). Beta-lactams were the most often prescribed class accounting for 36.02% of all antimicrobial prescriptions. The average cost for a beta-lactam prescription was R99.53. The average cost per over-the-counter product was R32.75, compared to R158.21 for prescription-only antimicrobials. Most products were tablets (61.80%), followed by capsules (16.25%) and suspensions (14.39%). Per prescription, the injections were the most expensive (average of R343.85 per prescription), followed by ampoules (R324.56) and solutions (R267.33). Creams were on average the least expensive (R31.24).

There was a clear peak in prescribing during the winter months (May to August). The single most often prescribed trade name product was a generic combination product of amoxicillin and clavulanic acid. On average, the most expensive trade name product was Valcyte 450R tablets (valganciclovir) at R12 217.76. **CONCLUSIONS:** This study provided a general overview of antimicrobial prescribing cost in a South African primary care patient population. Costs varied hugely with generic prescribing influencing costs.

PIN36

SIX YEARS OBSERVATIONAL STUDY OF THE COST OF HIGHLY ACTIVE ANTIRETROVIRAL THERAPY AND HIV/AIDS CONTROL

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OBJECTIVES: To analyze the changes in the highly active antiretroviral pharmacotherapy during the period 2006-2011 and its impact on cost and disease control of HIV/AIDS patients in Bulgaria. **METHODS:** It is a combined retrospective and prospective observational real life study on cost and therapeutic results of AIDS patient's therapy. Information was gathered for 2/3 of the treated patients for the antiretroviral combinations therapy and its cost, CD4 count and viral load. The changes in the dosage regimes, cost of therapy and its influence on CD4 count and viral load were evaluated. Descriptive statistic, Wilcoxon tests, and Spearman correlation analysis were applied. **RESULTS:** On total 162 patients were included and out of them 48 identified with the changes in their therapy. Nearly 40 different dosage regimes were found prescribed as combinations of 3 or 4 medicines. During the period were introduced 3 new antiretroviral medicines (tenofovir, emtricitabine, darunavir). The average yearly cost of pharmacotherapy is increasing from 155 837.64 euro to 319 571.76 euro during 2006 - 2011. To all treatment naive patients were prescribed the newly authorized medicines that lead to sustained suppression of viral load to <20 in 45.46%. Introduction of the new medicines led to the increase in total pharmacotherapy cost with 291 89.64 euro, but also to better disease control. Statistically significant were the changes in the mean cost of therapy in 2007 vs 2006 (p=0,0002) and in 2010 vs 2009 (p< 0,0001). We found the statistically significant changes among the mean cost of therapy and viral load (p=0,0221), as well as among the mean cost of therapy and CD4 count (p=0,05). The correlation among the therapeutic results and the therapeutic combinations were found in 2011 (p=0,0064). **CONCLUSIONS:** AIDS remain costly disease for the health insurance budget but new medicines led to better control on its progression.

PIN37

THE ECONOMIC BURDEN OF INITIAL EMPIRIC ANTIBIOTIC FAILURE ON HEALTH CARE RESOURCE UTILIZATION FOR HOSPITALIZED PATIENTS WITH COMPLICATED INTRA-ABDOMINAL INFECTIONS (CIAIS) IN GREECE

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OBJECTIVES: To estimate the impact of initial empiric antibiotic treatment failure on pharmacological and total health care costs in hospitalized patients with CIAIS. **METHODS:** The economic impact associated with initial empiric antibiotic treatment failure was based on the results of an observational epidemiological study involving 201 adults with cIAI in Greece (NCT00929643). An average per patient-per day DRG value was estimated based on diagnosis at discharge and DRG mapping. Daily cost was then extrapolated to the additional length of stay (LOS), associated with initial antibiotic failure. Costs included expenditure for additional ICU and surgical interventions. DRG matching was validated by a specialist medical advisor. Mean per patient DRGs were weighed against subject percentage in each diagnosis group. Mean per patient costs for unsuccessful initial therapies were calculated using the latest formulary prices and the mean number of days on each antibiotic agent, as recorded in the observational study. **RESULTS:** The most frequently reported diagnoses (201 subjects) were perforation of the intestine (15.9%), acute appendicitis with peritoneal abscess (13.4%) and post-operative peritonitis (13.4%). Patients most commonly received metronidazole (59.2%), followed by b-lactamase inhibitors (38.3%) and second generation cephalosporines (30.3%) as empiric antibiotic treatment (as part of monotherapy, double therapy or triple therapy schemes). 78 patients exhibited failure of the initial treatment, whereas initial treatment was successful in 111 subjects with respective hospitalization of 21.9±16.4 and 8.9 ± 4.5 days. Total additional per patient resource cost was estimated to be €3,761.56 inclusive of unsuccessful mean empiric antibiotic expenditure, which was estimated to be €220.06 per patient. **CONCLUSIONS:** Retrospective data collected for a 2-year period showed that a significant percentage (42.9%) of patients exhibited failure of their initial antibiotic treatment. These patients had a greater chance of requiring prolongation of hospitalization and more extensive use of health care expenditure during times where resources are scarce.

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REAL LIFE STUDY OF ANTIFUNGAL TREATMENT IN GREEK ICUS: THERAPEUTIC STRATEGY AND HOSPITAL RESOURCE UTILIZATION - ESTIMATOR STUDY

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