DIABETES

PD 1

COMPLIANCE WITH AMERICAN DIABETIC ASSOCIATION (ADA) RECOMMENDATIONS IN A TYPE 2 DIABETIC POPULATION IN AN ACADEMIC FAMILY MEDICINE CENTER

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OBJECTIVES: To characterize the population, measure compliance with ADA recommendations, and categorize medication usage.

METHODS: All type 2 diabetics (N = 116) visiting a family medicine center during January 1997 as recorded in an electronic medical record were included. Recommendations for "continuing care visits" were the key data elements retrospectively reviewed for a 1-year period (January–December 1997). Demographic, health insurance, routine office visit (e.g., weight, blood pressure, eye and foot exams), dietary and exercise planning, disease monitoring (e.g., self blood glucose monitoring, serum glycated hemoglobin, serum cholesterol, urinalysis), and detailed drug usage data were collected.

RESULTS: The sample had a mean age of 61.1 years, was 53.4% African American and 44.8% Caucasian, and was 69.0% female. A government-financed health insurance plan insured most patients (71.5%). On the average, a patient had about eight office visits annually. Agreement with ADA recommendations of weight and blood pressure measurements at each visit was observed in 56.0% and 78.4% of the patients respectively. Most patients did not have annual primary care eye (57.8%) or dilated ophthalmic (42.2%) or foot (73.3%) examinations documented. Agreement with laboratory recommendations was as follows: annual total cholesterol: 59.5%; semiannual glycated hemoglobin: 14.7%; and annual urinalysis: 66.4%. Most patients (92) were treated with a single drug; 23 of 116 patients used two drugs. Glyburide and glypizide were prescribed most frequently. Compliance with recommendations increased with age and in patients receiving multiple versus single or no drug therapy.

CONCLUSION: Documentation of current practice shows wide variation from ADA recommendations for type 2 diabetics. Interventions to modify documentation are planned.

INFECTIOUS DISEASE

COST-EFFECTIVENESS OF LEVOFLOXACIN VERSUS CLARITHROMYCIN IN PATIENTS EVALUABLE FOR CLINICAL EFFICACY IN THE TREATMENT OF ACUTE BACTERIAL SINUSITIS Rance L¹. Dornsief B²

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OBJECTIVE: Resource utilization and cost-effectiveness data were compared in patients taking 500 mg od (AM) levofloxacin (levo) with that of 500 mg bid clarithromy-cin for up to 14 days.

METHODS: Patients were eligible for this multicenter, double-blind study if they had signs and symptoms of acute sinusitis, including X-ray evidence. Clinical response was evaluated 2-5 days after completion of therapy and at 1 month post therapy. Utilization parameters were determined from the cost of drug, cost of the physician's office or emergency room visit, and costs of concomitant medications. The total cost of resources and average cost per patient was calculated. The cost-effectiveness ratio was determined by taking the average cost of product divided by the proportion of clinical success as assessed by investigator. The incremental cost-effectiveness ratio is the mean cost per levo patient minus the mean cost per clarithromycin patient, divided by the proportion of clinical success of levo minus the proportion of clinical success of clarithromycin. Cost-minimization was calculated from the mean cost per levo patient minus the mean cost per clarithromycin patient.

RESULTS: 191 patients had resource utilization data, 98 in the levo group and 93 in the clarithromycin group. The total cost of resources was \$11,566.24 for levo and \$12,635.14 for clarithromycin. Average cost per patient was \$119.24 for levo and \$135.86 for clarithromycin. The cost-effectiveness ratio for levo was 1.3, and for clarithromycin 1.5. Because clinical success rates were similar a cost minimization analysis was performed. The result was 16.6. The incremental cost-effectiveness ratio was -50.5. **CONCLUSION:** In patients with similar clinical success rates, this study shows that levo 500 mg od is more cost-effective than 500 mg bid clarithromycin.

COST-MINIMIZATION ANALYSIS OF CEFAMANDOLE AND TOBRAMYCIN VERSUS STANDARD THERAPY IN THE TREATMENT OF PATIENTS WITH LOCAL APPENDICULAR PERITONITIS

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Cost \$ (1997 year)	СТ	ST	P value
Level I	103.0 ± 41.0	4.9 ± 3.2	0.001
Level II	275.3 ± 118.1	89.9 ± 99.1	0.001
Level III	172.2 ± 96.9	75.5 ± 99.6	0.904

OBJECTIVES: Pharmacoeconomic assessment of cefamandole/tobramycin (CT) versus standard therapy (ST) in the treatment of local appendicular peritonitis (LAP). Standard therapy was antibacterial drugs routinely used for treatment of LAP in centers of study. It was allowed to add metronidazole to both regimes.

METHODS: Clinical outcomes and health resource utilization data were collected from 92 patients enrolled in an open, comparative, randomized, prospective, multicenter trial comparing the efficacy and safety of CT versus ST in the treatment of LAP. A cost-minimization analysis was performed from the institutional perspective. Costs of study antibiotics, treatment of failures and adverse events (AE), and hospitalization were calculated.

RESULTS: The most common regimes in ST were ampicillin (27%), ampicillin + oxacillin (11%), penicillin + gentamicin (9%), penicillin + kanamycin (9%). Metronidazole was used in five patients in CT and in four patients in ST. Cure rates were 42 of 44 (95.5%) for CT and 41 of 45 (91.1%) for ST (p = 1.000). Adverse events (AE) were 12 of 47 (25.5%) for CT and 10 of 45 (22.2%) for ST (p = 0.547). Three levels of cost were analyzed: level I = study drug acquisition cost; level II = level I + preparation/administration + treatment of AE/ failures + hospital bed costs; level III = level II – level I. **CONCLUSIONS:** ST was cost-effective compared to CT in the treatment of LAP. The pharmacoeconomic advantage of ST was due to the significantly lower acquisition cost of ST antibiotics.

MENTAL HEALTH AND NEUROLOGIC DISORDERS

PMH 1

ANNUAL DIRECT COSTS OF PSYCHOTROPIC MEDICATIONS FOR THE TREATMENT OF PSYCHIATRIC DISORDERS IN INDIA

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OBJECTIVES: The present study ascertains the annual direct costs of common psychotropic medications used in the management of common psychiatric disorders in a country with limited financial resources.

METHODS: The direct costs of the psychopharmacological agents evaluated were antidepressants (tricyclic, SSRI, and newer antidepressants available); antipsychotics (phe-

nothiazines, butrophenones, and atypical antipsychotics); benzodiazepines and sedatives. The annual direct costs of the medications were ascertained from the recent monthly index for medical specialties (MIMS), from standard chemists, and from pharmaceutical firms. The statistical mode or most frequent cost was considered for further computations.

RESULTS: Regarding antidepressants, tricyclics were noted to have the following annual costs (1 US = Rs. 43): Imipramine Rs. 1130 (US \$26.3), amitriptyline Rs. 1460 (\$34), dothiepin Rs. 2410 (\$56.1), trimipramine Rs. 2430 (\$56.5) and clomipramine Rs. 6130 (\$142.6). Fluoxetine has an annual cost of Rs. 840 (\$19.5), mianserin Rs. 2010 (\$46.7), amoxapine Rs. 3835 (\$89.1), amineptine Rs. 10,700 (\$248.8), and the most expensive, tianeptine, Rs. 21,000 (\$488). The recently introduced antidepressant sertraline has an annual cost of Rs. 2740 (\$63.7). Prophylaxis for affective disorders with lithium therapy would have an annual cost of Rs. 1200 (\$27.9). Regarding antipsychotics, the annual costs of oral medications of chlorpromazine and haloperidol were the same, Rs. 2000 (\$46.5), long-acting oral penfluridol Rs. 500 (\$11.6), and depot long-acting injectable fluphenazine decanoate, haloperidol decanoate, and flupenthixol Rs. 750 (\$17.4), Rs. 1500 (\$34.9), and Rs. 2100 (\$48.8), respectively. The newer atypical antipsychotics costs were: resperidone, Rs. 4500 (\$104.7) and clozapine Rs. 5500 (\$127.9). Benzodiazepines have an annual cost of \$7.5 for diazepam, \$3.5 for lorazepam and chlordiazepoxide, \$2.8 for oxazepam, and \$17.6 for alprazolam. Sleep medications nitrazepam, flurazepam and zopiclone have an annual cost of \$3.3, \$8, and \$18.8 respectively. CONCLUSION: The annual costs are amazingly less than those in Western nations, but nevertheless produce a significant burden on Indian families, and are a common reason for poor compliance. Another trend noted above is that newer antidepressants such as amineptine and tianeptine, antipsychotics such as resperidone and clozapine, and hypnotics such as zopiclone are much more expensive than the older medications. Thus, the annual costs of medications are only likely to increase with time, enhancing the financial burden of treating these psychiatric disorders.

PMH2

CLINICAL AND ECONOMIC CHARACTERIZATION OF FAMILY MEDICINE PATIENTS RECEIVING ANTIDEPRESSANT DRUGS

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Many antidepressant drugs are prescribed by generalist physicians. However, few details are available concerning the circumstances in which these drugs are utilized in primary care settings.