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Clinical and Pharmacoeconomic Evaluation of Switch to Olanzapine in Veterans with Schizophrenia or Schizoaffective Disorder

By Lori L. Davis, MD, Marshall E. Cates, PharmD, BCPP, FASHP, Joette S. Lowe, PharmD, L. Charles Ward, PhD, Jeffrey D. Johnson, RN, BSN, Raela B. Williford, PharmD, Sandra M. Ambrose, MSN, Brandi L. Thomas, LCSW, and Terrell Michael Kashner, PhD, JD, MPH

ABSTRACT ~ Background: Second-generation “atypical” antipsychotics improve the outcome of patients with schizophrenia, although studies of their cost efficacy in comparison to first-generation “conventional” antipsychotics have yielded mixed results. **Objectives:** This study examines the cost effectiveness outcome of olanzapine treatment in veterans with schizophrenia ($n = 22$) or schizoaffective disorder ($n = 4$). **Methods:** Health-care utilization and costs associated with prospective olanzapine treatment were compared with those of retrospective first-generation neuroleptic treatment in a mirror-image design. **Results:** The analysis of variance with repeated measures for the Positive and Negative Syndrome Scale (PANSS; $n = 22$) showed a significant main effect of olanzapine treatment ($p < .025$), and the effect was of medium-to-large size ($\eta^2 = .13$). The PANSS-positive subscale ($p < .005$) and the PANSS general subscale ($p < .005$) significantly decreased, but the PANSS negative subscale did not change. The quality of life survey ($n = 21$) significantly increased ($p < .025$), and the effect size was large ($\eta^2 = .14$). For VA outpatient and inpatient care, study patients incurred an average cost difference of $-\$1,289$ (NS) and $-\$6,682$ (NS),

Dr. Davis is affiliated with Research and Development Service, VA Medical Center, Tuscaloosa, AL, and is also affiliated with Department of Psychiatry, University of Alabama School of Medicine, Birmingham and Tuscaloosa, AL. Dr. Cates is affiliated with McWhorter School of Pharmacy, Samford University, Birmingham, AL. Dr. Lowe is affiliated with VA Southeast Network, Veterans Health Administration, Tuscaloosa, AL. Dr. Ward is affiliated with Psychology Service, VA Medical Center, Tuscaloosa, AL. Mr. Johnson is affiliated with Office of the Director, VA Medical Center, Tuscaloosa, AL. Dr. Williford is affiliated with Pharmacy Service, VA Medical Center, Tuscaloosa, AL and Auburn Harrison School of Pharmacy, Auburn, AL. Ms. Ambrose is affiliated with Research and Development Service, VA Medical Center, Tuscaloosa, AL. Ms. Thomas is affiliated with Mental Health Service, VA Medical Center, Tampa, FL. Dr. Kashner is affiliated with University of Texas Southwestern Medical Center, Dallas, TX.

To whom correspondence should be addressed: Lori L. Davis, MD, VA Medical Center, 3701 Loop Road East, Tuscaloosa, AL 35404, USA; Tel: 205-554-2000; Fax: 205-554-2877; E-mail: lori.davis@va.gov

respectively. Combining inpatient and outpatient VA care, patients incurred an annual difference of $-\$7,971$ per patient (NS). These numerically lower costs were due, in part, to a slower growth rate in outpatient encounters ($p = .013$), lower overall cost per outpatient encounter ($p = .008$), and a lower overall inpatient encounter rate ($p = .005$). **Conclusions:** Olanzapine treatment resulted in improvements in positive and general psychiatric symptoms, as well as quality of life. Negative symptoms did not change significantly. Though not statistically significant, the postbaseline health-care costs and utilization declined. *Psychopharmacology Bulletin*. 2008;41(1):85-98.

INTRODUCTION

Schizophrenia is a debilitating disorder that represents a significant health-care cost to society.¹ Clinical trials have shown that the second-generation “atypical” antipsychotic olanzapine improves psychotic symptoms, quality of life, and social and occupational function in patients with schizophrenia.^{2,3} Although not consistently demonstrating superior efficacy (except for clozapine), the second-generation neuroleptics reduce negative symptoms and have fewer extrapyramidal side effects when compared to first-generation “conventional” neuroleptics.⁴⁻⁶ The current controversy lies in the fact that olanzapine is a relatively expensive medication compared to other neuroleptics. However, indirect costs and costs of hospitalization constitute a larger portion of the cost of treating schizophrenia compared to medication-acquisition costs. Several studies have demonstrated net reductions in health costs and improvement in outcomes with olanzapine treatment.⁷⁻⁹ However, a recent double-blind randomized study¹⁰ comparing olanzapine with haloperidol in 309 veterans with schizophrenia or schizoaffective disorder found significantly greater procurement costs for olanzapine, without significant differences between treatment groups in regard to health-care costs, symptom improvement, or quality of life.

This current study examines the cost effectiveness and clinical outcome of olanzapine treatment in a veteran population with schizophrenia or schizoaffective disorder, who had previously experienced incomplete response or distressing side effects to first-generation antipsychotics.

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