

then 5.7 at 15 minutes, 4.2 at 30 minutes, and 2.9 at 2 hours. Restraint duration was compared with restraint data from 80 patients receiving conventional intramuscular agents during the month immediately preceding the current study. Restraint duration decreased from 91 ± 4 to 54 ± 3 minutes with ziprasidone ($n=77$; $P<.01$), and durations varied with conventional intramuscular antipsychotics, with a mean restraint time of 60 ± 12 minutes ($n=7$; $P=NS$). Of 19 ziprasidone patients receiving ECGs, none had prolonged QTc interval; 1 dystonic reaction occurred with ziprasidone.

Conclusion: Intramuscular ziprasidone appears effective for severe agitation, including that from alcohol- or substance-induced intoxication. Intramuscular ziprasidone may also lead to reduced time in restraints compared with conventional agents.

71 Depressive Symptoms and Suicidality in Women Experiencing Intimate Partner Violence

Houry D, Kaslow NJ, Thompson MP/Emory University, Atlanta, GA; Clemson University, Clemson, SC

Study objectives: We compare 2 groups of abused black female emergency department (ED) patients (suicide attempters and nonattempters) with regard to specific depressive symptoms.

Methods: The study was a cross-sectional examination of intimate partner violence (IPV)-positive black women who presented to the medical or psychiatric ED for treatment. Black women with a recent history of IPV who presented after an attempted suicide ($n=100$) were compared with demographically comparable IPV-positive black women who had not attempted suicide and presented for treatment of another condition ($n=100$). Women completed face-to-face interviews on several measures, including demographics and the Beck Depression Inventory-II (BDI-II). Multivariate analysis of variance was used to test the hypothesis that attempters would report higher levels on the BDI-II items compared with their nonattempting counterparts. Analyses of variance were used to assess on which specific BDI-II items the groups differed. A logistic regression analysis, using the BDI-II variables with moderate effect sizes, was conducted to predict group status.

Results: Overall, there were no demographic differences between cases and controls. Attempters reported statistically significant higher scores on all 21 BDI-II items than did nonattempters. Four BDI-II items had effect size values in the medium range: sadness, self-dislike, suicidal thoughts, and feelings of worthlessness. The logistic regression model using these 4 variables correctly predicted group status 78% of the time.

Conclusion: IPV patients who attempt suicide have higher levels of depressive symptoms than nonattempters. Symptoms of sadness, self-dislike, suicidal thoughts, and feelings of worthlessness had the highest predictive value. These 4 items can be used as a brief screen in the ED to detect female IPV patients at increased risk for suicidal behavior.

72 Depacon in the Acute Treatment of Mania

O'Bryan EC, Vesper FH, Vesper B, McMullan J, Limehouse J/Medical University of South Carolina, Charleston, SC

Study objectives: Anticonvulsants are a first-line treatment for acute mania and offer a safer and more efficacious treatment than lithium. Oral loading with valproic acid is US Food and Drug Administration approved. Valproate, the intravenous form of valproic acid, reaches peak serum concentration 4 times faster than valproic acid but is primarily used for acute seizure treatment. There is minimal literature on intravenous valproate in treating acute mania.

Methods: We describe a pilot study designed to test the safety and efficacy of intravenous valproate in treating manic patients presenting to the emergency department (ED). Five subjects, aged 21 to 50 years, who met *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* criteria for mania, were enrolled between May 1999 and April 2002. On admission to the ED, consent, blood tests, and physical examination were obtained. Psychiatric testing, including the clinical global impression score (CGI), brief psychotic rating scale (BPRS), and Young's mania rating scale (YMRS), were administered before and 1, 2, and 24 hours after valproate infusion. A loading dose of 1,200 mg valproate was given over a 1-hour period at initial testing.

Results: No adverse effects were noted. Mean scores before infusion were consistent with moderate to severe mania (CGI=4.8, BPRS=32.6, and YMRS=21.2). One hour after infusion, scores were reduced 12.5%, 7.4%, and 15.1%, respectively. The 2-hour interval showed further improvement from baseline of 29.2%, 16.6%, and 21.7%. Twenty-four hour follow-up for 4 of 5 patients showed a 37.5%, 17.2%, and 30.2% decrease from baseline. Two of the 5 patients were treated as outpatients, with transition to oral valproate.

Conclusion: Notable decreases in illness severity rapidly occurred in all manic subjects receiving intravenous valproic acid. However, because of low enrollment, no statistical significance can be inferred. Also, we must caution that decreased symptomatology could be due to sedation rather than reduction of the manic episode. Typically, manic patients require hospitalization; intravenous loading of valproate may decrease hospital stay or possibly alleviate the need for admission. This pilot study would suggest that further inquiry is warranted.

73 Impact of Depressive Illness on Emergency Department Recidivism: A New Approach to the "Frequent Flyer"

Lora A, Simpson M, Freed M, Milzman D/Georgetown University School of Medicine, MedStar Health, Washington, DC; Georgetown University, Washington Hospital Center, Washington, DC

Study objectives: Recent articles have found an increasing rate in depressive illness and the successful use of a 2-question case-finding instrument for depression screening (2DEP?). Repeated emergency department (ED) visits for nonemergency causes and chronic problems have been previously addressed. No study has screened for a depressive illness link as a causation for these patients seeking frequent ED care. This study evaluates the relationship between screening results for depression and frequency of ED repeated visit.

Methods: This institutional review board-approved, prospective survey evaluated all ED patients presenting during 10 consecutive days in randomized 6-hour blocks, with all hours equally represented. Adult patients presenting awake, alert, not in extremis, and without a psychiatric complaint were included and asked to answer 2DEP?. Patient characteristics, chief complaints, length of stay, number of visits during the past 12 months, and final diagnoses were included in analyses.

Results: A total of 370 patients were included, with 54% female patients and a mean age of 42.3 years. These patients had a mean 2.7 (95% confidence interval 2.3 to 3.1) ED visits in the previous 12 months. Thirty-three percent of patients answered affirmative to both depression screening questions, and 44.2% of patients answered negatively to both questions, with 55.8% answering affirmatively to at least 1 question. The frequency of ED visits and depression screening correlated well ($P=.75$). Patients answering yes to both 2DEP? had a mean 3.3 visits, 1 positive response had 2.8 annual visits, and no positive responses had 1.5 annual visits (2-tailed $\chi^2=0.011$). The severity of visits did not differ between these 3 groups according to length of stay and mortality data.

Conclusion: Despite being tested at a single institution, depression screening was found to predict ED patient return visits, with a high likelihood for nonemergency causes. After confirmation of these results in a multicenter study, antidepressant treatment and psychiatric referral may reduce the problem of ED patient recidivism.

74 Ziprasidone in Bipolar Mania: Efficacy Across Patient Subgroups

Potkin SG, Keck P, Giller E, Ice K, Warrington L, Mandel FS/University of California-Irvine, Irvine, CA; University of Cincinnati College of Medicine, Cincinnati, OH; Pfizer Global Research and Development, New London, CT; Pfizer Inc, New York, NY

Study objectives: We evaluate the efficacy and tolerability of ziprasidone in acute bipolar mania, focusing on clinically relevant subgroups.

Methods: This was a pooled analysis of 2 randomized, double-blind, 21-day trials comparing flexible-dose ziprasidone (40 to 80 mg twice daily) with placebo in adults with mania associated with bipolar I disorder. Changes in Mania Rating Scale (MRS) score and Clinical Global Impression of Severity (CGI-S) were calculated for combined study populations and in subgroups of patients with manic episodes, mixed episodes, and with or without psychotic symptoms.

Results: At last visit, mean change in MRS score in patients receiving ziprasidone ($n=268$) was -11.72 (baseline 26.82) versus -6.69 (baseline 26.53) in patients

receiving placebo (n=131; $P<.001$). Change in CGI-S for ziprasidone was -1.19 (baseline 4.71) versus -0.66 (baseline 4.76) for placebo ($P<.001$). Significant improvement versus placebo was observed from day 2 for MRS score and day 4 for CGI-S. MRS score and CGI-S changes were comparably robust whether patients' manic episode was classified as acute or mixed or was complicated by psychotic symptoms or not. Overall, ziprasidone subjects had a response rate of 48% and a remission rate of 40% (both $P<.01$ versus placebo).

Conclusion: Ziprasidone rapidly improves symptoms and global illness severity in bipolar mania. It is comparably efficacious in mixed and manic episodes and in the presence or absence of psychotic symptoms and is well tolerated.

75 "Fill 'Er Up!" in the Pharmacy of Last Resort: Predictors of Refill-Seeking Behavior in the Emergency Department

Miller AH, Larkin GL, Jimenez CH/University of Texas Southwestern Medical Center, Dallas, TX

Study objectives: We determine predictors of medication refill-seeking behavior in emergency department (ED) patients with chronic illness.

Methods: This was a prospective, cross-sectional ED survey of chronic medication use in a large public hospital ED (>140,000 visits/year) during a 6-week period. Adult ED patients (>18 years) taking chronic medications for congestive heart failure, diabetes mellitus, or hypertension were included.

Results: Of 1,168 patients approached, none refused participation; 344 (29%) presented to the ED after running out of medications. Significant univariate predictors of "being in the ED for a medication refill" include age younger than 50 years, non-Hispanic ethnicity, low income (<\$5,000/year), self-pay payer status, and being told to call a primary care provider (PCP) before medication would be refilled. Patients who did not know where the refill or pharmacy numbers were on their medication bottle were more than twice as likely to be in the ED for a medication refill (odds ratio [OR] 2.4, 95% confidence interval [CI] 1.6 to 3.6; and OR 2.0, 95% CI 1.3 to 2.9, respectively). Conversely, patients who had refills listed on their medication bottles and those who had called the pharmacy for a refill in the past were only 33% and 25% as likely to be in the ED for a medication refill on the index visit (OR 0.31, 95% CI 0.2 to 0.49; and OR 0.24, 95% CI 0.16 to 0.34, respectively). When other demographic and clinical variables in a multivariate logistic regression model were controlled, there was a significant association between being in the ED for a medication refill and being uninsured, being ED reliant, being uninformed about refill numbers, being told to see a PCP for a refill, and having been admitted to the hospital in the previous 12 months ($P<.01$).

Conclusion: Presenting for medication refills is common in ED patients with chronic illness; especially for those who are younger, uninsured, on a limited income, and unaware of common medication refill practices.

76 Basic Cardiopulmonary Resuscitation Program for High School Students (PROCES): Results From the Pilot Program

Sanchez M, Jimenez S, Diaz N, Miro O/Hospital Clinic, Barcelona, Spain; Centre D'Ensenyament Secundari Ari Molina, Barcelona, Spain

PROCES was supported in part by Nestlé Espana SA.

Study objectives: Programa de Reanimacio cardiopulmonar Orientat a Centres d'Ensenyancas Secundarias (PROCES) is aimed at teaching basic cardiopulmonary resuscitation (CPR) to teenagers in high school. The aim was to analyze results obtained from the pilot program.

Methods: PROCES was split in 7 sessions. Specific concepts, methods, and attitudes pointed out in each session had to be reached by students. The first 4 sessions and the seventh session were prepared to be taught by teachers of high school. Health providers were in charge of teaching the fifth and sixth sessions, which included how to perform basic CPR. To assess the degree of students' learning, they took a 20-question test before (PRE-PROCES) and after (POST-PROCES) the program. The test was divided into 2 parts: 10 questions related to basic CPR concepts and 10 questions about basic CPR skills. Finally, students were requested to rate the program from 0 to 10. These data, along with epidemiologic characteristics from the first 250 students, were collected and analyzed. Results are presented in percentages and mean (SD).

Results: Students were 14 years old (36%), 15 years old (40%), 16 years old (22%), and 17 years or older (2%). Fifty-five percent were male students, 18% would like to study a health-related course at the university, 39% did not pass at least 1

subject within the past school year, and 13% had previously taken a first aid or similar course. For the PRE-PROCES test, the mean score (>20 points) was 8.6 (2.8): 4.2 (1.5) in concepts and 4.4 (1.5) in skills. After PROCES, scores improved up to 14.2 (3), with 6.1 (1.9) in concepts and 8.2 (1.6) in skills ($P<.001$ for all comparisons). There were no differences between sex, intention to study a health-related course, and having failed any subject. However, students who had previously taken a first aid course got significantly better scores in the test and the skills sections. These differences disappeared after PROCES completion. Students rated the theoretical part as 7.9 (1.1), the skills part as 8.2 (1.2), and the health providers as 8.4 (1.1). All 3 parts of the PROCES were rated significantly worse by students with at least 1 failed subject within the past school year.

Conclusion: PROCES is a useful tool for teaching and improving teenagers' knowledge and skills in basic CPR. The level of skills reached by students was good, although the teaching of theoretical concepts should be improved. In general, PROCES was welcomed by students.

77 Are There Differences Between Households With Children and Without Children Regarding the Degree of Household Preparedness for a Disaster Such as Fire, Flood, Earthquake, Blackout or Devastating Act Such as a Terrorist Attack in the Community?

Barata IA, Llovera I, Ward M, Miele D, Sama A, Falitz S, Rapaport A, Ayan J/North Shore University Hospital, Manhasset, NY

Study objectives: The purpose of this study is to compare the level of disaster preparedness for individual households with and without children.

Methods: This was a prospective survey of a convenience sample of English-speaking adults in the emergency department waiting area (includes patients and visitors) during a 3-month period in 2004. The survey asked for the following information: demographics, including number of children in the household; whether the individual had a specific disaster plan in effect for their family; knowledge of disaster plans at their place of work or their children's school or daycare center; whether they had essential supplies, medications, batteries, battery-powered radios, smoke detectors, or carbon monoxide detectors at home; and whether they had a communication plan in effect. These are current recommendations by the Department of Homeland Security and the American Red Cross.

Results: A total of 414 surveys were completed by participants: 78% between the ages of 30 to 69 years, 56% female participants, 70% white, 64% married, 87% with a high school or greater level of education, 51% with children in the household, and 30% with household income greater than \$100,000 per year. We obtained the following results. Fifty-five percent of households with children reported having done no specific disaster planning for the family compared with 63% of households without children ($P=.0883$). Fifty-three percent of households with children compared with 46% of households without children ($P=.1782$) reported changing their degree of preparedness after the blackout in the Northeast in 2003. Forty-seven percent of households with children are aware of the guidelines for household disaster preparedness compared with 45% of households without children ($P=.7329$). Forty percent of households with children versus 50% of households without children have no knowledge of disaster plans at work ($P=.0344$). Thirty-eight percent of participants with children in the household are not aware of their school or daycare disaster plans. Sixty-three percent of participants with children compared with 71% without children in the household ($P=.2678$) have no portable easy-to-carry container with essential supplies. At home, 88% versus 83% of participants have a battery-powered radio, and 91% versus 92% of participants with and without children have a flashlight, respectively. Eighty-eight percent of participants with children versus 72% without children have a first aid kit at home ($P=.0097$). Fifty-two percent versus 56% of participants with and without children reported having "special needs" items such as formula and medications in the house in case of an emergency. Seventy-nine percent of households with children versus 65% of households with children have a 3-day supply of food at home ($P=.0380$). Seventy-six percent of households with children and 62% without children have a 3-day water supply ($P=.0509$). We found that 91% of households with children versus 86% without children ($P=.1132$) have smoke detectors, and 53% of households with children versus 37% without children ($P=.0009$) have carbon monoxide detectors. The plan about communication strategies in case of an emergency showed that 48% of households with children versus 32% without children have a designated place to meet outside the neighborhood ($P=.0426$); 37% of households with children versus 45% without children have an out-of-state family