

**(148) Satisfaction with pain treatment in OEF/OIF veterans**

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Satisfaction with pain treatment is an important predictor of overall treatment adherence and retention in medical care. Studies have found that pain severity is related to satisfaction with pain treatment. Although there is little data on Veterans' satisfaction with pain treatment, recent reports reveal gender differences in pain prevalence and severity among Veterans who use the Veterans Health Administration (VHA) system of care. This suggests that women, who make up an increasing number of active military personnel and Veterans, may experience less satisfaction with pain treatment than men. We conducted a cross-sectional survey of Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) Veterans who recently separated from military service, who had 1 or more VHA visits. Data on age, sex, race, education, depression, type of provider (VA only, non-VA only, or both), average pain in the past week, and percent of pain relief were assessed. Participants in the sample were 44.7% male and 55.3% female. In a multivariate logistic analysis, average pain over the past week and percentage of pain relief were significant predictors of satisfaction with pain treatment ( $p < 0.001$ ). Gender was also found to be a significant predictor, with female Veterans having 37.5% less satisfaction with pain treatment compared to male Veterans ( $p = 0.0475$ ). These results suggest that gender disparities exist for satisfaction with pain treatment.

**(149) Age-related differences in recovery from pain due to motor vehicle collision: a prospective longitudinal study**

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Motor-vehicle collisions (MVCs) are a common cause of injury among adults of all ages and frequently result in persistent pain. Data from other settings suggest that recovery from an acute painful condition may take longer in older adults than in younger adults. We analyzed data from a prospective study of adults experiencing MVC to examine recovery from an acute pain condition across the adult lifespan. European Americans presenting to one of eight emergency departments (EDs) after MVC without fracture or injury requiring admission were enrolled. Pain severity was evaluated in-person in the ED and by phone six weeks after the MVC using a 0-10 scale. Multivariable linear regression was used to assess the relationship between patient age group, represented as 10-year interval categories, and pain recovery, defined as the change in pain from the ED to the six week assessment, adjusting for patient sex, vehicle damage, and pain in the month prior to the MVC. Of 705 patients with complete ED and six week data who had not hired a lawyer at 6 weeks, 541 patients (77%) had moderate or severe pain (pain score  $> 4$ ) in the ED. Among these patients, pain recovery decreased with advancing age group ( $p < .01$ ). After adjusting for patient sex, vehicle damage, and pain in the month prior to the MVC, the relationship between age group and pain recovery persisted, with generally lower mean decreases in pain for older than younger age groups: age 18-24=3.2 (95% CI 2.7-3.6); 25-34=3.0 (2.6-3.5); 35-44=1.9 (1.4-2.5); 45-54=2.3 (1.7-3.0); 55-64=2.1 (1.3-2.8);  $> 65=1.9$  (0.9-2.9);  $p < .005$ . Further research is needed to characterize and understand the social, psychological, and biological factors contributing to reduced recovery from acute musculoskeletal pain after injury in older adults. Supported by NIAMS R01AR056328 and NCRRT2 TR000084.

**(150) Musculoskeletal/chronic pain assessment during nurse based screening clinics for non-communicable diseases: Kenya**

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Policy makers in global health have shifted towards recognition of non-communicable diseases (NCDs) as a growing threat to the well-being of individuals in under resourced countries. Yet musculoskeletal conditions (MSK) are not among those formally recognized NCDs. On previous screenings in Kenya a nearly universal complaint of MSK pain was noted. We sought to further characterize these patients and begin to define practical treatments in extremely resource-limited environments. Patients were seen in 5 screening clinics, one urban and four rural around Nairobi. In addition to cardiovascular disease (CVD) risk assessment, a series of questions were asked, in native language, re: pain including demographics, perceived health, daily pain presence, pain location, chronicity, pain-limited activity; depression and stress. The clinics were conducted by US/Kenyan teams comprised of nursing students, faculty and clinic staff. A subset of patients were seen and offered treatment including medication and individualized recommendations. Practical tips for easing, limiting or preventing low back or knee pain were provided through brochures in Kiswahili developed for this project. Chronic pain, most likely OA, is common among patients presenting to a screening clinic for CVD risks. Patients ( $n=858$ ) were black, Kikuyu ethnicity; mean age 55 yrs ( $\pm 17.4$ ), 79% female. 63% reported daily pain; 50% for months or years duration (chronic pain); 40% at multiple sites, 33% lower extremity, 25% low back, 22% upper extremity. Pain was significantly associated with older age ( $p < .001$ ), perceived fair/poor health ( $p < .001$ ) and systolic BP  $> 140$  ( $p < .005$ ). Of those reporting daily pain; 80% reported chronic pain, 51% increased stress, 48% had BMI  $> 25$  and 65% reported pain-limited activity. NCD risk assessment by nursing students and clinic staff in rural and urban health clinics in Kenya afford an opportunity to address pain management, provide prevention skills and population interventions in extreme resource-limited areas.

**(151) Economic burden of neuropathic pain in the United States: BEAT neuropathic pain observational study**

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Neuropathic pain (NeP) has been associated with incremental direct medical and indirect costs in studies of painful diabetic neuropathy (pDPN) and chronic low back pain (CLBP). This cross-sectional, observational study sought to characterize NeP's economic burden, by pain severity, across multiple NeP conditions: pDPN, CLBP with NeP, human immunodeficiency virus-related NeP, post-trauma/post-surgical NeP, spinal cord injury-related NeP, and painful peripheral neuropathy with small fiber involvement. A total of 624 subjects recruited during routine office visits completed validated measures of pain severity and productivity and questions about demographics, employment status, healthcare resource use (HRU) and out-of-pocket expenses. Physicians reported clinical characteristics, NeP-related treatments and HRU based on 6-month retrospective chart review. Mean subjects' age was 55.5 years; 55.4% were male. Moderate to severe pain severity was observed in 80.8% overall, ranging from 75.7%-92.5% across NeP conditions. The most common comorbidities were depressive symptoms (42.6% overall), sleep disturbance/insomnia (42.1% overall), and anxiety (except CLBP-headache/migraine) (35.1% overall); which increased with pain severity ( $p < 0.0038$ ). Overall, 90.2% and 47.8% took  $\geq 1$  prescription and non-prescription medication, ranging from 81.3%-98.1% and 38.8%-55.7% across NeP conditions, respectively. Subjects had a mean of 3.3 physician office visits over 6 months. Among employed subjects (18.9% overall), mean overall work impairment was 44.4%. Mean overall activity impairment was 56.5%. Overall, mean annualized direct and indirect costs were \$8,201 and \$18,546, respectively, with means ranging from \$4,654-\$12,121 for NeP types for annualized direct costs and \$9,632-\$30,425 for annualized indirect costs. Overall, medication use, office visits, lost productivity and activity impairment, and costs increased with greater pain severity ( $p < 0.0017$ ). Across NeP types, subjects exhibited high pain levels, which were associated with prevalent medication use and HRU, productivity loss and substantial direct and indirect costs, pointing to potential benefits of more effective NeP management. Study supported by Pfizer, Inc.